## CANADA

PROVINCE DE QUÉBEC DISTRICT DE MONTRÉAL
C.A. ${ }^{\circ}$ :
C.S. $N^{\circ}$ : 500-06-000484-093

## COUR D'APPEL

BAYER INC., personne morale ayant une place d'affaire au 1250, boul. René-Lévesque Ouest, bureau 2820, Montréal, district de Montréal, Québec, H3B 4W8, Canada

## APPELANTE/Défenderesse

c.

JANIE GUINDON, domiciliée et résidant au 37, impasse Roger-Parizeau, Gatineau, district de Gatineau, Québec, J9H 0B9, Canada
-et-
GENEVIÈVE GLADU, domiciliée et résidant au 124, rue Léo-Gravelle, Vaudreuil-Dorion, district de Beauharnois, Québec, J7V 0B1, Canada
-et-
JULIEN LEBOEUF, domicilié et résidant au 124, rue Léo-Gravelle, Vaudreuil-Dorion, district de Beauharnois, Québec, J7V 0B1, Canada

INTIMÉS/Demandeurs

DEMANDE POUR PERMISSION D'APPELER D'UN JUGEMENT QUI AUTORISE
L'EXERCICE D'UNE ACTION COLLECTIVE
(Articles 357 et 578 C.p.c.)
Partie Appelante
Datée du 5 septembre 2018

## À L'UN DES HONORABLES JUGES DE LA COUR D'APPEL, LA PARTIE APPELANTE EXPOSE CE QUI SUIT :

1. L'appelante Bayer Inc. («Bayer») demande la permission d'en appeler d'un jugement de la Cour supérieure rendu le 26 juillet 2018 par l'honorable Guylène Beaugé, J.C.S., siégeant dans et pour le district de Montréal, dans le dossier portant le numéro 500-06-000484-093 (le « Jugement» - Annexe 1)¹.
2. Le Jugement accueille en partie la Demande re-re modifiée pour obtenir l'autorisation d'exercer une action collective et pour obtenir le statut de représentants (la «Demande d'autorisation»-Annexe 2) de Janie Guindon, Geneviève Gladu et Julien Leboeuf (les «Intimés») telle que modifiée verbalement lors de l'audience sur l'autorisation tel qu'il appert du procès-verbal d'audience du 30 janvier 2018 (Annexe 3).
3. Plus précisément, le Jugement a autorisé l'exercice d'une action collective sous la forme d'une demande introductive d'instance en dommages et accordé aux Intimés le statut de représentants des personnes faisant partie du groupe suivant :
«Toutes les personnes résidant au Québec, incluant leurs successeurs, ayants droit, membres de leurs familles et personnes à charge, qui se sont fait prescrire et ont utilisé les médicaments YASMIN et/ou YAZ, depuis leur introduction respective sur le marché (10 décembre 2004 dans le cas de Yasmin et 6 janvier 2009 dans le cas de Yaz) et la date du 30 novembre 2011, et qui ont reçu un diagnostic de thrombose veineuse profonde, d'embolie pulmonaire, de thromboembolie artérielle ou de la maladie de la vésicule biliaire. » (le « Groupe »)
4. Bayer joint en liasse comme Annexe 4 les pièces suivantes qui sont nécessaires à l'obtention de la permission d'en appeler recherchée :
a) déclaration sous serment amendée du Dr André Masse, MD, CSPA, FRCSC datée du 17 juin 2016 (la « Déclaration du Dr Masse ») déposée par Bayer;

[^0]b) déclaration sous serment du Dr Steven A. Grover, MD, datée du 19 août 2016 (la « Déclaration du Dr Grover ») déposée par les Intimés;
c) transcription de l'interrogatoire du Dr Grover tenu le 13 décembre 2016; et
d) étude de M. Etminan et al. publiée en mai 2011 dans le Canadian Medical Association Journal (l'« étude Etminan ») (Pièce P-12).
5. Bayer est justifiée de demander la permission d'en appeler du Jugement puisqu'il comporte à sa face même des erreurs déterminantes concernant l'interprétation des conditions d'exercice de l'action collective et l'appréciation des faits relatifs à ces conditions.
6. En effet, Bayer soumet que la juge de première instance a commis des erreurs déterminantes en concluant que les Intimés avaient rencontré leur fardeau de démontrer qu'ils avaient une cause d'action personnelle soutenable et pouvaient donc agir à titre de représentants dans l'action collective proposée.
7. Plus particulièrement, les Intimés n'ont pas démontré de manière même prima facie que :
a) les problèmes de santé allégués de Mme Guindon et de Mme Gladu pouvaient avoir été causés par la prise de YAZ pour la première et de Yasmin pour la seconde, et donc que les faits apparaissaient justifier les conclusions recherchées au sens de l'article 575 ( $2^{\circ}$ ) du Code de procédure civile (le «C.p.c. »), alors que l'examen de leurs dossiers médicaux tant par le Dr Masse que par le Dr Grover ne supporte pas de telles conclusions;
b) Bayer avait failli à son devoir d'information à leur égard concernant les risques prétendument accrus de développer des maladies de la vésicule biliaire et donc que les faits apparaissaient justifier les conclusions recherchées au sens de l'article 575 ( $2^{\circ}$ ) C.p.c., alors que la seule allégation de faits sur laquelle elles se fondent réfère à une étude publiée plusieurs années après que Mme Guindon et Mme Gladu aient consommé YAZ/Yasmin.
8. De plus, la juge de première instance a également commis des erreurs déterminantes en déclarant que Bayer avait consenti aux questions proposées comme étant identiques, similaires ou connexes (questions communes) portant sur la causalité individuelle et sur les dommages compensatoires, alors que ces questions ont été fortement contestées, et en les autorisant comme des questions appropriées au sens de l'article $575\left(1^{\circ}\right)$ C.p.c. alors qu'il ne s'agit pas, à leur face même, de questions pouvant être traitées collectivement.

## I. CONTEXTE

9. La demande d'autorisation initiale dans le dossier portant le numéro 500-06-000484-093 a été déposée le 22 octobre 2009 par Mme Alexandra Paton contre Bayer et Bayer A.G., Berlex Canada Inc., Bayer Schering Pharma A.G., Bayer Corporation, Bayer Healthcare, LLC et Bayer Heatlhcare Pharmaceuticals Inc.
10. Cette demande initiale a été amendée une première fois en 2010, notamment afin d'ajouter trois demandeurs/représentants proposés (Mme Guindon, Mme Gladu et M. Serge Bouchard), une deuxième fois le 28 mai 2015 afin de retrancher Mme Paton et afin de retirer toutes les défenderesses à l'exception de Bayer, une troisième fois le 2 février 2017 afin de remplacer M. Bouchard par M. Lebœuf, conjoint de Mme Gladu, à titre de demandeur/représentant proposé, et une quatrième fois de manière verbale le 30 janvier 2018 lors de l'audience sur l'autorisation afin de modifier certaines des questions communes et des conclusions recherchées et d'accepter, de manière subsidiaire, la définition du groupe proposée par Bayer.
11. Mme Guindon allègue avoir développé des calculs biliaires en octobre 2009, s'être fait enlever la vésicule biliaire en novembre 2009, avoir subi une thrombose veineuse profonde en décembre 2009 et avoir subi des embolies pulmonaires en janvier 2010. Elle attribue ces problèmes de santé allégués à l'utilisation de YAZ, qu'elle aurait commencé à utiliser en août 2009.
12. Mme Gladu allègue avoir éprouvé des douleurs abdominales en juin 2009 et avoir été hospitalisée entre le 7 juin 2009 et le 7 juillet 2009 pour des calculs biliaires, pour se faire enlever la vésicule biliaire, pour des pancréatites et pour des embolies pulmonaires. Elle attribue ces problèmes de santé allégués à l'utilisation de Yasmin, qu'elle aurait commencé à utiliser en mars 2008.
13. M. Lebœuf, le conjoint de Mme Gladu, allègue quant à lui avoir souffert de dommages suite à l'hospitalisation de cette dernière.
14. L'action collective sous la forme d'une demande introductive d'instance en dommages compensatoires et punitifs repose sur la prétention que YAZ/Yasmin causeraient des risques accrus de thrombose artérielle, de thromboembolie veineuse et de maladie de la vésicule biliaire comparativement aux autres contraceptifs oraux («COs ») disponibles. Les Intimés allèguent que Bayer aurait commis une faute en n'informant pas adéquatement les membres du Groupe et/ou leurs médecins de tels risques et en faisant des représentations trompeuses quant à la nature sécuritaire de YAZ/Yasmin, lesquels auraient causé des préjudices corporels, moraux et matériels aux membres du Groupe.

## II. LES MOTIFS JUSTIFIANT D'ACCORDER LA PRÉSENTE DEMANDE

## A. L'ABSENCE de CAUSE D'ACTION PERSONNELLE SOUTENABLE DES INTIMÉS

15. À sa face même, le Jugement comporte des erreurs déterminantes quant à l'interprétation de la condition d'exercice d'une action collective prévue à l'article $575\left(2^{\circ}\right)$ C.p.c., à savoir que les faits allégués dans la Demande d'autorisation, examinés à la lumière de la situation individuelle des Intimés, paraissent justifier les conclusions recherchées.
16. La juge de première instance a correctement reconnu que le critère de l'article 575 $\left(2^{\circ}\right)$ C.p.c. devait s'examiner à la lumière de la situation individuelle des
représentantes proposées ${ }^{2}$, soit de Mme Guindon et de Mme Gladu³, et que pour satisfaire ce critère, la réclamation des Intimés devait prendre appui sur plus que de simples possibilités. La réclamation ne doit pas non plus reposer sur des allégations erronées à la lumière de la preuve déposée de part et d'autre ${ }^{4}$.
17. Toutefois, elle a ensuite ignoré la preuve déposée par les deux parties démontrant clairement que les Intimés n'avaient pas de cause d'action personnelle soutenable, que les allégations ne reposaient que sur de simples possibilités, hypothèses ou soupçons ou encore sur des opinions et non des faits.
18. Tel que souligné récemment par cette Cour, au stade de l'autorisation, la partie demanderesse doit présenter une « cause soutenable », donc ayant « une chance de réussite», et pour ce faire, doit présenter en preuve «l'essentiel et l'indispensable » au soutient de cette cause ${ }^{5}$.

## i. Quant à la causalité

19. En matière de responsabilité de produits pharmaceutiques, simplement alléguer au soutien d'une demande d'autorisation que l'on attribue ses problèmes de santé au produit en question relève de l'opinion et n'est pas un fait qui peut être tenu pour avéré par la Cour.
20. De plus, avoir une cause soutenable et présenter en preuve l'essentiel et l'indispensable ne peut respectueusement pas vouloir dire se contenter de déposer une déclaration sous serment d'un expert concluant que le risque de contribuer à certains problèmes de santé associés à la prise d'un médicament ne peut pas être considéré comme étant de zéro.

2 Jugement, paragr. 19.
3 En tant que prétendue victime par ricochet, M. Lebœuf n'a quant à lui aucune cause d'action personnelle à faire valoir si Mme Gladu n'en a pas.
4 Jugement, paragr. 18.
$5 \quad$ Baratto c. Merck Canada inc., 2018 QCCA 1240, paragr. 51.
21. Si tel était le cas, toutes les demandes d'autorisation en matière de responsabilité de produits pharmaceutiques ou comportant une question de causalité reposant sur la science seraient nécessairement accordées. En effet, rares sont les cas dans le domaine de la santé où quiconque peut affirmer qu'un risque est de zéro. Une telle conclusion rendrait la nécessité de démontrer avoir une cause soutenable dénuée de tout fondement.
22. Or, en l'espèce, en ce qui concerne Mme Guindon, la juge de première instance a complètement écarté la preuve non contredite à l'effet que :

- Mme Guindon présentait des facteurs de risques importants reliés au développement de calculs biliaires, soit l'obésité et l'usage du tabac ${ }^{6}$;
- Seulement deux mois après le début de l'utilisation de YAZ, une échographie démontrait que le calcul biliaire de Mme Guindon était de $3,2 \mathrm{~cm}$, de sorte qu'il était en formation bien avant le début de la prise de YAZ ${ }^{7}$;
- Mme Guindon présentait des facteurs de risques importants de phénomènes thrombo-emboliques, soit des facteurs personnels tels que l'obésité, l'usage du tabac, un taux de cholestérol élevé et le fait d'être porteuse du facteur V de Leiden, lequel, à lui seul, augmente de sept fois le risque de phénomène thrombo-embolique ${ }^{8}$, et des facteurs circonstanciels tels que l'immobilisation, I'hospitalisation et la chirurgie ${ }^{9}$.

23. En réponse à la déclaration du $\operatorname{Dr}$ Masse, les Intimés ont déposé la déclaration du Dr Grover, un médecin généraliste qui a admis n'avoir aucune expertise clinique ou de recherche en matière de COs ou de maladies de la vésicule biliaire, et qui s'est dit en accord avec le Dr Masse quant aux facteurs de risques importants présentés par Mme Guindon. II n'a pas conclu qu'il était probable ou même

Déclaration du Dr Masse, paragr. 7 et 15.
7 Déclaration du Dr Masse, paragr. 5 et 8.
$8 \quad$ Déclaration du Dr Masse, paragr. 15 à 17.
$9 \quad$ Déclaration du Dr Masse, paragr. 15 et 16.
vraisemblable que la prise de YAZ ait contribué aux problèmes de santé allégués par cette dernière. Au contraire, il a affirmé être d'accord que les autres facteurs de risques étaient plus vraisemblablement responsables de ses problèmes.
24. En effet, en ce qui concerne les phénomènes thrombo-emboliques de Mme Guindon, il s'est dit d'accord que leur cause première était son immobilisation et sa chirurgie dans les mois précédant leur survenance. Il a toutefois ajouté, sans expliquer pourquoi, qu'il ne pouvait pas conclure que la prise de YAZ n'ait pas contribué du tout (risque de zéro) au risque thrombo-embolique, tout en précisant qu'il ne s'agirait que d'un rôle mineur si c'était le cas ${ }^{10}$.
25. Il s'est également dit d'accord que Mme Guindon présentait de nombreux facteurs de risques importants associés au développement de calculs biliaires. Cependant, il a encore une fois ajouté qu'il ne pouvait pas conclure que le risque de contribution de YAZ était de zéro. Il n'a fourni aucune explication basée sur les dossiers médicaux de Mme Guindon pour soutenir ce point de vue, mais s'est plutôt appuyé uniquement sur une seule étude, soit l'étude Etminan qui conclut que ledit risque est mineur et non cliniquement significatif ${ }^{11}$.
26. Avec respect, cela ne rencontre pas le fardeau de démonstration si peu élevé soitil de l'article $575\left(2^{\circ}\right)$ C.p.c. puisque le recours proposé de Madame Guindon fondé sur une telle affirmation n'a aucune chance de réussite. Il ne s'agit pas d'un cas ici où il y a un débat d'expert devant être tranché au mérite mais bien d'un cas où le fardeau minimum de démonstration n'est pas rencontré sur la foi même des allégations et de la preuve des Intimés.
27. Quant à Mme Gladu, la juge de première instance a également écarté la preuve non contredite à l'effet que :

10 Déclaration du Dr Grover, paragr. 7.
11 Déclaration du Dr Grover, paragr. 8-13; étude Etminan (pièce P-12), pages 899 et 902; et interrogatoire du Dr Grover, page 38.

- Mme Gladu présentait des facteurs de risques importants reliés au développement de calculs biliaires, soit l'obésité, l'hypertriglycérédémie et un historique familial, lequel à lui seul double le risque ${ }^{12}$; et
- Mme Gladu présentait des facteurs de risques importants de phénomènes thrombo-emboliques, soit des facteurs personnels comme l'obésité, l'usage de COs depuis longtemps (Yasmin depuis 2008, mais Triphasil puis Alesse depuis 2005) et des facteurs circonstanciels tels que, l'immobilisation, l'hospitalisation et la chirurgie ${ }^{13}$.

28. Encore une fois, le Dr Grover s'est dit en accord avec le Dr Masse quant aux facteurs de risques importants présentés par l'historique de Mme Gladu et n'a pas conclu qu'il était probable ou même vraisemblable que la prise de Yasmin ait contribué à ses problèmes de santé allégués. Au contraire, il a conclu que le phénomène thrombo-embolique de Mme Gladu subi pendant son hospitalisation avait vraisemblablement été causé par son immobilisation et son inflammation, mais a ajouté qu'il ne pouvait pas conclure que le risque de développer des calculs biliaires relié à la prise de Yasmin était de zéro dans son cas et ce, toujours en se basant uniquement sur l'étude Etminan ${ }^{14}$.
29. Encore une fois, avec égard, cela ne rencontre pas le fardeau de démonstration si peu élevé soit-il de l'article $575\left(2^{\circ}\right)$ C.p.c.
ii. Quant au devoir d'information en ce quí concerne la vésicule biliaire
30. Tel que reconnu par cette Cour, afin de démontrer avoir une cause soutenable relativement à un défaut d'information, encore faut-il avoir une allégation de fait
pouvant être tenue pour avérée à l'effet que l'information existait et n'a pas été divulguée au moment de la consommation du produit ${ }^{15}$.
31. Or, la juge de première instance a aussi commis une erreur déterminante en écartant le fait que la seule allégation portant sur le défaut d'information concernant un prétendu risque accru de développer des maladies de la vésicule biliaire en lien avec l'utilisation de YAZ/ Yasmin, comparativement à d'autres COs, réfère à une étude publiée uniquement en mai 2011 (concluant par ailleurs que ce risque n'est pas cliniquement significatif), soit après la prise de YAZ par Mme Guindon en 2009 et de Yasmin par Mme Gladu en 2008 et 2009.
32. Il ne peut donc clairement pas y avoir une cause d'action soutenable fondée sur le devoir d'information quant au supposé risque accru de développer des maladies de la vésicule biliaire et ce risque n'aurait donc pas dû être inclus dans la définition du groupe ou les questions communes proposées.
33. À tout évènement, la juge n'a pas non plus tenu compte du fait que le risque en soi de développer des maladies de la vésicule biliaire en utilisant un CO était déjà divulgué dans les monographies de YAZ/Yasmin au moment où Mme Guidon et Mme Gladu ont utilisé ces COs, et qu'elles avaient admises toutes les deux avoir lu cette monographie et avoir été informées du risque.

## B. L'AUTORISATION DE QUESTIONS QUI, À LEUR FACE MÊME, NE PEUVENT PAS FAIRE L'OBJET de détermination commune

34. Le Jugement comporte également des erreurs déterminantes quant à la détermination des questions communes pouvant être autorisées conformément au critère de l'article $575\left(1^{\circ}\right)$ C.p.c. en identifiant comme questions à être traitées collectivement des questions qui, à leur face même, ne peuvent pas faire l'objet d'une détermination commune.
35. Le Jugement indique faussement au paragraphe 41 que Bayer a consenti aux questions communes proposées portant sur la causalité individuelle et sur les dommages compensatoires alors que cette proposition a été fortement contestée.
36. En se basant sur ce «consentement » erroné, la Juge de première instance, sans procéder à quelqu'analyse que ce soit, a commis une erreur déterminante en les identifiant dans le Jugement comme faisant partie des principales questions de faits et de droits qui seront traitées collectivement.
37. Dans une action collective en matière pharmaceutique, il est de jurisprudence constante que l'octroi de dommages compensatoires exige, une fois que la faute et/ou le défaut de sécurité ont été établis, que le dommage et le lien de causalité entre les deux le soient également pour tous les membres du Groupe individuellement, le tout selon la prépondérance des probabilités et selon les règles de preuve habituelles ${ }^{16}$. II n'est tout simplement pas possible d'éviter la tenue de procès individuels pour traiter de la causalité individuelle et des dommages.
38. En plus d'être inadéquates, l'identification de la causalité individuelle et des dommages compensatoires comme questions devant être déterminées collectivement à l'étape du procès sur les questions communes dans les avis aux membres induit ceux-ci en erreur. Ces derniers auront l'impression de n'avoir jamais à démontrer que leurs problèmes de santé ont bel et bien été causés par la prise de YAZ/Yasmin, ni à démontrer quels sont les dommages qu'ils ont réellement subis, alors que ce n'est clairement pas le cas.
39. Il est dans le meilleur intérêt de la justice que la présente demande soit accueillie.

Il n'y a pas de disposition légale similaire à l'article 15 de la Loi sur le recouvrement du coût des soins de santé et des dommages-intérêts liés au tabac, laquelle permet de faire la preuve du lien de causalité sur la base d'un rapport épidémiologique dans une action prise sur une base collective, qui soit applicable en l'espèce.

## L'APPELANTE DEMANDERA À LA COUR D'APPEL :

## ACCUEILLIR l'appel;

INFIRMER le jugement rendu par la Cour supérieure le 26 juillet 2018;

REJETER la Demande re-re modifiée pour obtenir l'autorisation d'exercer une action collective et pour obtenir le statut de représentants ( $\mathrm{Re}-\mathrm{Re}$-Amended Motion to authorize the bringing of a class action \& to ascribe the status of representatives) telle que modifiée verbalement lors de l'audience du 30 janvier 2018;

CONDAMNER les Intimés Janie Guindon, Geneviève Gladu et Julien Lebœuf aux frais de justice tant en première instance qu'en appel.

## POUR CES MOTIFS, PLAISE À LA COUR :

ACCUEILLIR la présente demande;

ACCORDER à l'appelante la permission d'en appeler du jugement de la Cour supérieure rendu en date du 26 juillet 2018, par l'honorable Guylène Beaugé, J.C.S., siégeant dans le district de Montréal, dans le dossier portant le numéro 500-06-000484-093.

LE TOUT, frais à suivre selon le sort de l'appel.

MONTRÉAL, le 5 septembre 2018

<br>SOCIÉTÉ D'AVOCATS TORYS S.E.N.C.R.L. Avocats de l'appelante Bayer Inc.<br>Me Sylvie Rodrigue<br>srodrigue@torys.com<br>Tél. : 514.868.5601<br>Me Marie-Ėve Gingras<br>mgingras@torys.com<br>Tél. : 514.868.5607<br>Me Geneviève Bertrand<br>gbertrand@torys.com<br>Tél. : 514.868.5604<br>1 Place Ville Marie, Suite 2880<br>Montréal, Québec H3B 4R4<br>Fax: 514.868-5700<br>notifications-mtl@torys.com<br>Code d'impliqué : BS-2554<br>Notre référence : 34506-2039

## DÉCLARATION SOUS SERMENT

Datée du 5 septembre 2018

Je, soussignée, Marie-Ėve Gingras, avocate, exerçant ma profession au sein de la Société d'avocats Torys S.E.N.C.R.L., au 1, Place Ville Marie, suite 2880, Montréal, district de Montréal, province de Québec, H3B 4R4, affirme solennellement ce qui suit :

1. Je suis l'une des procureures de l'Appelante Bayer Inc. dans la présente instance;
2. Tous les faits allégués à la présente demande sont vrais.

## ET J'AI SIGNÉ

à Montréal, en ce $5^{e}$ jour de septembre
2018


MARIE-ĖVE GINGRAS

Affirmé solennellement devant moi, à Montréal, ce $5^{\text {e }}$ jour de septembre 2018


Commissaire a tassermentation pour le Québec


## AVIS DE PRÉSENTATION



PRENEZ AVIS que la présente Demande pour permission d'appeler d'un jugement qui autorise l'exercice d'une action collective sera présentée pour décision le 15 novembre 2018, à 9h30, à l'un des juges de la Cour d'appel siégeant au Palais de Justice de Montréal, situé au 100, rue Notre-Dame Est, à Montréal, H2Y 4B6, dans la salle RC-18.

## VEUILLEZ AGIR EN CONSÉQUENCE.

MONTRÉAL, le 5 septembre 2018


LISTE DES ANNEXES AU SOUTIEN DE LA DEMANDE POUR PERMISSION
D'APPELER D'UN JUGEMENT QUI AUTORISE L'EXERCICE D'UNE ACTION COLLECTIVE

Partie Appelante
Datée du 5 septembre 2018
ANNEXE 1: Jugement daté du 26 juillet 2018 rendu par l'honorable Guylène

ANNEXE 2: Demande re-re modifiée pour obtenir l'autorisation d'exercer une action collective et pour obtenir le statut de représentants ( $\mathrm{Re}-\mathrm{Re}$ Amended Motion to authorize the bringing of a class action \& to ascribe the status of representatives).

ANNEXE 3: Procès verbal d'audience daté du 30 janvier 2018.
ANNEXE 4 : 1. Déclaration sous serment amendée du Dr André Masse, MD, CSPA, (en liasse) $\quad$ FRCSC datée du 17 juin 2016;
2. Déclaration sous serment du Dr Steven A. Grover, MD, datée du 19 août 2016;
3. Transcription de l'interrogatoire du Dr Steven A. Grover tenu le 13 décembre 2016;
4. L'étude de M. Etminan et al. publiée en mai 2011 dans le Canadian Medical Association Journal (Pièce P-12).

MONTRÉAL, le 5 septembre 2018
Societé d'avcat. TGRES SENCRL
SOCIETE D'AVOCATS TORYS S.E.N.C.R.L.
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Code d'impliqué : BS-2554
Notre référence : 34506-2039

ANNEXE 1

# COUR SUPÉRIEURE <br> (Chambre civile) 

CANADA
PROVINCE DE QUÉBEC
DISTRICT DE MONTRÉAL
$\mathrm{N}^{\circ}: \quad 500-06-000484-093$
DATE: 26 JUILLET 2018

## SOUS LA PRÉSIDENCE DE L'HONORABLE GUYLÈNE BEAUGÉ, J.C.S.

## JANIE GUINDON

-et-
GENEVIÈVE GLADU
-et-
JULIEN BOUCHARD
Demandeurs
c.

BAYER INC.
Défenderesse

## JUGEMENT

sur une demande re-re-re-modifiée pour autorisation d'exercer une action collective et pour obtenir le statut de représentants

## 1. CONTEXTE

[1] Mesdames Janie Guindon et Geneviève Gladu, ainsi que monsieur Julien Leboeuf (les DEMANDEURS) demandent l'autorisation d'exercer une action collective contre Bayer inc. (BAYER) au nom du groupe suivant :

All persons residing in Quebec who were prescribed and ingested the drugs YASMIN and/or YAZ, from the respective introductions of these drugs into the market (December 10, 2004, in respect of Yasmin and January 6, 2009, in respect of YAZ) and the date of November 30, 2011, and their successors,
assigns, family members, and dependants or any group to be determined by the Court.

Traduction de la défenderesse: Toutes les personnes résidant au Québec qui se sont fait prescrire et ont utilisé les médicaments YASMIN et/ou YAZ, depuis leur introduction respective sur le marché (10 décembre 2004 dans le cas de Yasmin et 6 janvier 2009 dans le cas de Yaz) et la date du 30 novembre 2011, et leurs successeurs, ayants droit, membres de leurs familles et personnes à charge, ou tout autre groupe à être déterminé par la Cour.]
[2] Subsidiairement, ils consentiraient à la définition alternative suivante proposée par Bayer :

All persons residing in Quebec, including their successors, assigns, family members, and dependants, who were prescribed and ingested the drugs Yasmin and/or Yaz, from the respective introductions of these drugs into the market (December 10, 2004, in respect of Yasmin and January 6, 2009, in respect of YAZ) and the date of November 30, 2011, and who were diagnosed with deep vein thrombosis, pulmonary embolism, arterial thromboembolism or gallbladder disease.

Toutes les personnes résidant au Québec, incluant leurs successeurs, ayants droit, membres de leurs familles et personnes à charge, qui se sont fait prescrire et ont utilisé les médicaments YASMIN et/ou YAZ, depuis leur introduction respective sur le marché ( 10 décembre 2004 dans le cas de Yasmin et 6 janvier 2009 dans le cas de Yaz) et la date du 30 novembre 2011, et qui ont reçu un diagnostic de thrombose veineuse profonde, d'embolie pulmonaire, de thromboembolie artérielle ou de la maladie de la vésicule biliaire.
[3] Dans ce recours en matière pharmaceutique, les demandeurs reprochent à Bayer diverses fautes dans la conception, la fabrication, la mise au point de la formule, la préparation, la transformation, l'inspection, les essais, l'emballage, la promotion, la mise en marché, la distribution, l'étiquetage ou la vente des contraceptifs oraux Yasmin et Yaz. Ils lui imputent des représentations trompeuses auprès de la communauté médicale et du public concernant la sécurité de ces contraceptifs.
[4] En outre, les demandeurs blâment Bayer de ne pas avoir adéquatement mis en garde la communauté médicale et le public contre les risques accrus des conséquences graves suivantes: thromboses, caillots, embolies pulmonaires, crises cardiaques, accidents vasculaires cérébraux, troubles et infections de la vésicule biliaire, insuffisance hépatique, insuffisance rénale, anxiété sévère, dépression, ainsi que mort subite.

## [5] Plus spécifiquement :

- Mme Guindon allègue avoir développé des calculs biliaires en octobre 2009, et avoir subi une ablation de la vésicule biliaire en novembre 2009, une thrombose
veineuse profonde en décembre 2009, ainsi que des embolies pulmonaires en janvier 2010. Elle attribue ses problèmes de santé à l'utilisation de Yaz;
- Mme Gladu allègue avoir éprouvé des douleurs abdominales en juin 2009, et avoir été hospitalisée entre les 7 juin et 7 juillet 2009 pour des calculs biliaires, l'ablation de la vésicule biliaire, des pancréatites et des embolies pulmonaires. Elle attribue ses problèmes de santé à l'utilisation de Yasmin;
- M. Leboeuf, conjoint de Mme Gladu, allègue un préjudice moral comme suite à l'hospitalisation de celle-ci, à savoir le stress, des inquiétudes quant à son état de santé, ainsi que la peur de la perdre.
[6] Les demandeurs définissent comme suit les questions de faits et de droit identiques, similaires ou connexes dont ils recherchent la détermination ${ }^{1}$ :

49. The recourses of the members raise identical, similar or related questions of fact or law, namely:
a. Do Yasmin and/or YAZ cause an increased risk of arterial thromboembolism ${ }^{2}$ (ATE), veneous thromboembolism ${ }^{3}$ (VTE), or gallbladder disease ${ }^{4}$ (GBD) compared to other available oral contraceptives?
b. Was Bayer negligent and/or did it commit a fault and/or did it fail in its duty of safety, duty of care, and/or duty to inform imposed upon it as manufacturer, distributer and/or seller of Yaz and Yasmin?
c. Do Yaz and Yasmin possess a superior efficacy over other contraceptives available on the market?
d. Did Bayer knowingly, recklessly or negligently breach a duty to warn class members and/or their physicians of the risks of harm from the use of Yaz and Yasmin?
e. Did Bayer knowingly, recklessly or negligently misrepresent to class members and/or their physicians the risks and benefits from the use of Yaz and Yasmin?
f. Did Bayer engage in false advertising when it represented, through advertisements, promotions and other representations, that Yaz and Yasmin were safe?

[^1]g. Did Bayer engage in false advertising when it represented, through advertisements, promotions and other representations, that Yaz and Yasmin had a superior efficacy over other contraceptions?
$h$. In the affirmative to any of the above questions, did Bayer conduct engage its liability towards the members of the class?
i. If the responsibility of the Bayer is established, what is the nature and the extent of damages and other remedies to which the members of the class can claim?
j. Are members of the class entitled to bodily, moral, and material damages?
k. Are members of the class entitled to recover the medical costs incurred in the screening, diagnosis and treatment of medical conditions caused by taking Yaz and Yasmin?
I. Are the members of the class entitled to recover as damages an amount equal to the purchase price of Yaz and Yasmin or any part of the purchase price?
m. Question retirée
n. Are members of the class entitled to aggravated or punitive damages?
[7] Puis par jugement final sur l'action en dommages-intérêts, ils recherchent le versement de dommages-intérêts compensatoires et punitifs, ainsi que la restitution des profits tirés par Bayer de la vente de Yasmin et Yaz:
52. The conclusions that Petitioners wish to introduce by way of a motion to institute proceedings are:

GRANT the class action of Petitioners and each of the members of the class;
DECLARE the Respondent liable for the damages suffered by the Petitioners and each of the members of the class;

CONDEMN the Respondent to pay to each member of the class a sum to be determined in compensation of the damages suffered, and ORDER collective recovery of these sums;

CONDEMN the Respondent to reimburse to each of the members of the class, the purchase price of the product, and ORDER collective recovery of these sums;

CONDEMN the Respondent to pay to each of the members of the class, punitive damages, and ORDER collective recovery of these sums;

RESERVE the right of each of the members of the class to claim future damages related to the use of Yaz and Yasmin;

CONDEMN the Respondent to pay interest and additional indemnity on the above sums according to law from the date of service of the motion to authorize a class action;

ORDER the Respondent to deposit in the office of this court the totality of the sums which forms part of the collective recovery, with interest and costs;

ORDER that the claims of individual class members be the object of collective liquidation if the proof permits and alternately, by individual liquidation;

CONDEMN the Respondent to bear the costs of the present action including expert, notice fees and the fees relating to administering the plan of distribution of the recovery in this action;

RENDER any other order that this Honourable court shall determine and that is in the interest of the members of the class;
[8] Le litige s'étale du 10 décembre 2004 au 30 novembre 2011 dans le cas de Yasmin, et du 6 janvier 2009 au 30 novembre 2011 dans le cas de Yaz, soit la période écoulée entre d'une part, leur mise en marché respective au Canada, et d'autre part, la modification des monographies desdits contraceptifs oraux.
[9] Notons que deux actions collectives visant Yaz et Yasmin sont pendantes au Canada: la première certifiée le 15 avril 2013 par la Cour supérieure de justice de l'Ontario ${ }^{5}$, et la seconde, le 4 octobre 2016, par la Cour du Banc de la Reine de la Saskatchewan. Ce dernier recours consiste en une action de classe nationale, à l'exclusion de l'Ontario et du Québec ${ }^{6}$.

## 2. QUESTIONS EN LITIGE

[10] Le litige consiste à déterminer si la demande d'autorisation d'exercer une action collective satisfait les quatre conditions édictées à l'article 575 du C.p.c. :
575. Le tribunal autorise l'exercice de l'action collective et attribue le statut de représentant au membre qu'il désigne s'il est d'avis que: $1^{\circ}$ les demandes des membres soulèvent des questions de droit ou de fait identiques, similaires ou connexes; $2^{\circ}$ les faits allégués paraissent justifier les conclusions recherchées; $3^{\circ}$ la composition du groupe rend difficile ou peu pratique l'application des règles sur le mandat d'ester en justice pour le compte d'autrui ou sur la jonction d'instance; $4^{\circ}$ le membre auquel il entend attribuer le statut de représentant est en mesure d'assurer une représentation adéquate des membres.

[^2][11] Il s'agira également de décider, le cas échéant, s'il convient d'attribuer le statut de représentants aux demandeurs, ainsi que de définir le Groupe, les questions communes à traiter collectivement, et les conclusions qui s'y rattachent.

## 3. ANALYSE

[12] Deux grands principes encadrent l'application de l'article 575 C.p.c: 1) la procédure d'autorisation ne constitue pas une préenquête sur le fond; et 2) les critères de l'article 575 C.p.c. s'interprètent généreusement, tout doute devant profiter à l'autorisation ${ }^{7}$. II s'agit en effet de favoriser l'objectif social de l'action collective, soit celui de permettre à des parties aux ressources limitées et aux réclamations souvent modestes d'obtenir réparation.
[13] Au stade de l'autorisation, le fardeau de la partie demanderesse consiste à établir une cause défendable ${ }^{8}$. À cette étape correspondant à un " mécanisme de filtrage et de vérification $»^{9}$, le tribunal, écartant les demandes frivoles ou manifestement mal fondées, rend un jugement «de vérification et de contrôle». En d'autres termes, la cour s'assure que les parties ne se retrouvent pas inutilement engagées dans un litige portant sur une demande insoutenable. Ainsi, à ce stade, le tribunal tranche une question procédurale, et ne se penche pas sur le fond du litige ${ }^{10}$.
[14] Par ce mécanisme de filtrage de l'article 575 C.p.c., le tribunal s'assure de la qualité du syllogisme juridique proposé en demande, tout en gardant à l'esprit que le seuil de preuve qui, bien que peu élevé ${ }^{11}$, doit néanmoins être franchi. Aussi, les allégations de la demande, tenues pour avérées, ne doivent pas se limiter à des généralités. Elles doivent s'articuler de manière suffisamment précise pour soutenir efficacement la reconnaissance du droit revendiqué ${ }^{12}$.
[15] Bayer plaide que les conditions des alinéas 2 et 4 de l'article 575 C.p.c. ne sont pas satisfaites. Subsidiairement, elle fait valoir la nécessité de redéfinir le groupe, ainsi que de reformuler les conclusions recherchées.

[^3][16] Il convient de commencer l'analyse des critères d'autorisation par l'examen du recours personnel des demandeurs, cela pour vérifier la validité du syllogisme juridique proposé ${ }^{13}$.

### 3.1 Article 575, al. 2 C.p.c.: les faits paraissent justifier les conclusions recherchées

[17] Le paragraphe $2^{\circ}$ de l'article 575 C.p.c. permet au tribunal d'écarter les actions frivoles ou manifestement mal fondées. Néanmoins, le pouvoir du tribunal demeure limité, s'apparentant au test de l'article 168, al. $2^{\circ}$ C.p.c. ${ }^{14}$. Ainsi, l'expression «paraissent justifier» signifie qu'à l'examen de la demande, le tribunal doit pouvoir conclure à une apparence sérieuse de droit, sans se prononcer sur le fond du litige.
[18] Une apparence sérieuse de droit repose sur des allégations qui prima facie semblent bien fondées en regard des faits essentiels. Cette exigence ne sera pas satisfaite si la réclamation prend appui sur la simple probabilité que ces faits existent, ou sur des allégations mensongères ou qui paraissent manifestement mal fondées à la lumière d'une preuve positive au contraire ${ }^{15}$.
[19] Enfin, ce critère s'examine à la lumière de la situation individuelle de la personne désignée ${ }^{16}$.
[20] Mme Guidon allègue commencer à utiliser Yaz, en août 2009, à l'âge de 22 ans. En octobre suivant, elle est informée avoir développé des calculs biliaires. En novembre, elle subit une résection de la vésicule biliaire, en décembre, souffre d'une thrombose veineuse profonde, et le 1er janvier 2010, fait une embolie pulmonaire. Elle ajoute avoir utilisé Yaz conformément au mode d'emploi, avoir été en bonne santé avant la prise de ce contraceptif, et ne jamais avoir été informée des risques accrus liés à $Y a z$, un contraceptif de quatrième génération, par rapport aux contraceptifs de deuxième génération.
[21] Mme Gladu allègue commencer l'utilisation de Yasmin en 2004, à l'âge de 25 ans. En juin 2009, elle présente des douleurs abdominales, puis entre le 7 juin et le 7 juillet, elle est hospitalisée pour des calculs biliaires, la résection de la vésicule biliaire, une pancréatite et une embolie pulmonaire. Elle ajoute avoir été en bonne santé avant la prise de Yasmin, l'avoir consommé selon le mode d'emploi, et ne jamais avoir été informée des risques accrus liés à ce contraceptif de quatrième génération. À la suite de son hospitalisation, son conjoint et père de ses deux enfants, M. Leboeuf, a vécu

[^4]dans la crainte de la perdre, et est demeuré anxieux quant à sa santé à court et long terme.
[22] Bayer plaide que le recours ne satisfait pas le critère de l'apparence sérieuse de droit, car les demandeurs n'ont pas de cause d'action personnelle à faire valoir. Elle soutient qu'il ressort de l'analyse de leurs dossiers médicaux que d'une part, les problèmes de santé de Mmes Guidon et Gladu n'ont pas été causés par la prise de Yaz et Yasmin, et que d'autre part, celles-ci connaissaient les risques associés à la prise de ces contraceptifs oraux et présentaient des facteurs de risques importants.
[23] Bayer ajoute que les allégations de la demande relatives à des représentations trompeuses quant à l'efficacité ou aux avantages de ces contraceptifs ne sont ni supportées par la preuve prima facie, ni ne peuvent être tenues pour avérées en raison de leur imprécision. Enfin, elle argue que les allégations de faute concernant un défaut d'information ne justifient pas les conclusions recherchées, car 1) aucun fait allégué ne peut être tenu pour avéré concernant des prétendus risques accrus de crises cardiaques, accidents vasculaires cérébraux, insuffisance hépatique, insuffisance rénale, anxiété sévère, dépression et mort subite associés à la prise de Yaz et Yasmin, et 2) les demandeurs ne se sont pas déchargés de leur fardeau de démontrer que la divulgation des risques de thrombose veineuse profonde, caillots sanguins, embolie pulmonaire ou de troubles et infections de la vésicule biliaire était inadéquate.
[24] Le Tribunal a autorisé la production d'une preuve appropriée consistant notamment en des extraits des dossiers médicaux de Mmes Guindon et Gladu, et en leur interrogatoire sur leur situation personnelle, leurs antécédents médicaux, leurs troubles de santé, la nature des effets secondaires et du préjudice allégués, ainsi que les informations reçues concernant les risques et bénéfices respectifs des contraceptifs Yaz et Yasmin.
[25] Le Tribunal a aussi permis le dépôt des déclarations assermentées des Dr. André Masse et Steven A. Grover, experts respectifs de Bayer et des demandeurs.
[26] Quant à Mme Guindon, à la question de savoir si ses problèmes de santé allégués, soit « les calculs biliaires, la cholécystectomie (résection de la vésicule biliaire), la thrombose veineuse profonde et les embolies pulmonaires auraient été causés par la prise de Yaz », le Dr Masse répond ce qui suit:

> 19. Les contraceptifs oraux estro-progestatifs, quels qu'ils soient, augmentent le risque de base de phénomène thrombo-embolique de 2 à 3 fois. Le contraceptif Yaz, utilisé par la patiente, et contenant la drospirénone (progestatif de quatrième génération), ne modifie pas significativement ce risque comparativement aux autres contraceptifs oraux estro-progestatifs. Par ailleurs, tel que discuté, tous les facteurs de risque présents chez madame Guindon et
son historique médical personnel, influencent et augmentent individuellement et collectivement, son risque thrombo-embolique. ${ }^{17}$
[27] Pour sa part, le Dr Grover ne peut exclure les risques accrus de complications associés à la prise de Yaz :
7. I agree with Dr. Masse that the primary cause of the thrombophlebitis was the immobility and surgery during the previous month for the removal of her gall bladder. I cannot rule out that Yasmin (sic) increased the risk of this complication but would consider this a minor factor compared to those associated with the surgery.
[...]
10. While this increased risk may be small compared to the other risk factors this patient had for gallstones, it cannot be considered zero based on the largest study to date.
11. [...] I agree with Dr. Masse that only two months of Yasmin was unlikely to be the sole cause of the gallstones but one cannot rule out that it contributed to the development of symptomatic disease where the existing stones grew larger with the introduction of Yasmin (sic) and finally obstructed the gall bladder. ${ }^{18}$
[28] Pour ce qui est de Mme Gladu, à la question de savoir si ses problèmes de santé allégués, soit « les calculs biliaires, la pancréatite biliaire, la cholécystectomie (résection de la vésicule biliaire), et les embolies pulmonaires auraient été causés par la prise de Yasmin ", le Dr Masse conclut comme suit:
26. Les contraceptifs oraux estro-progestatifs, quels qu'ils soient, augmentent le risque de base de phénomène thrombo-embolique de 2 à 3 fois. Tel que discuté, tous les facteurs de risque présents chez madame Gladu et son historique, influencent et augmentent individuellement et collectivement, son risque thrombo-embolique. Le contraceptif Yasmin, utilisé par la patiente, et contenant la drospirénone (progestatif de quatrième génération), ne modifie pas significativement ce risque comparativement aux autres contraceptifs oraux estro-progestatifs. ${ }^{19}$
[29] Dans ce cas également, le Dr Grover n'exclut pas les risques accrus par la prise de Yasmin:
15. As mentioned in the previous case, the thrombophlebitis that developed during her hospitalization for biliary obstruction and pancreatitis was probably

[^5]due to the immobilization and inflammation associated with these conditions that required her admission in the first place.
16. Accordingly, I cannot agree with Dr. Masse that the choice of Yasmin did not play any role in her admission for gallstones and pancreatitis followed by thrombophlebitis several days later. ${ }^{20}$
[30] La position de Bayer constitue une invitation à analyser minutieusement la preuve médicale, y compris des recherches et études contradictoires, à tirer des conclusions notamment sur le lien causal, et à considérer la valeur de ses moyens de défense pour rejeter la demande d'autorisation. Or, il faut résister à la tentation de se livrer à un tel exercice qui relève du fond de l'affaire ${ }^{21}$. Au stade de l'autorisation, le léger fardeau des demandeurs se limitait à démontrer le syllogisme juridique pour chacune des causes d'actions alléguées, et non à administrer une preuve prépondérante sur le lien causal ${ }^{22}$. Or, le Tribunal estime qu'ils ont atteint ce seuil minimal.
[31] La cause des demandeurs est défendable. La preuve déjà volumineuse, établit prima facie que Mmes Guindon et Gladu ont présenté un tableau médical qui semble compatible avec les risques accrus associés, dans certaines études, à la prise de Yaz ou Yasmin, et énoncés dans les monographies du 30 novembre 2011. En outre, leurs allégations voulant qu'elles n'aient pas été informées des risques accrus de développer des problèmes de santé n'apparaissent ni mensongères ni frivoles.

### 3.2 Article 575, al. 4 C.p.c. : la représentation adéquate des membres

[32] De façon générale, la personne qui se propose pour représenter le groupe doit satisfaire trois exigences : posséder un intérêt personnel à rechercher les conclusions proposées, détenir la compétence voulue pour agir comme mandataire, et ne pas se trouver en situation de conflit d'intérêts. Ces critères s'appliquent de manière libérale, le tribunal devant se garder de se montrer trop exigeant concernant la qualité du représentant ${ }^{23}$. En effet, aucun représentant ne devrait être exclu à moins que son intérêt ou sa compétence s'avèrent à ce point lacunaires qu'ils mettent en péril la survie de l'action.
[33] Ainsi, le représentant adéquat ne se définit pas comme le « meilleur représentant ", mais plutôt comme le justiciable moyen, de bonne foi, dont la réclamation personnelle s'avère valable et suffisamment fondée en droit, et qui agit dans l'intérêt des membres et au meilleur de ses capacités ${ }^{24}$. L'évaluation de la

[^6]compétence de cette personne ne devrait pas tenir compte de son assiduité aux audiences, de son niveau de connaissance du dossier judiciaire, ou encore de la qualité de ses réponses lors des interrogatoires préalables ${ }^{25}$.
[34] En sus de son argument selon lequel les demandeurs n'ont pas de cause personnelle à faire valoir - ce qui les disqualifierait d'emblée comme représentants ${ }^{26}$ Bayer plaide qu'ils ne présentent pas la compétence requise pour agir à ce titre. En effet, elle reproche à Mme Guindon de n'avoir lu la demande d'autorisation qu'en 2015, soit cinq ans après son ajout comme représentante proposée, de ne pas avoir pris connaissance de sa version modifiée avant sa production à la Cour, et de n'avoir formulé aucun commentaire. Quant à Mme Gladu, elle n'aurait pris connaissance des pièces au soutien de la demande d'autorisation qu'en juillet 2016, peu avant son interrogatoire. De plus, Bayer souligne que les demandeurs n'ont effectué aucune démarche, n'ont pas échangé avec d'autres utilisatrices de Yaz ou Yasmin, et n'ont pas tenté de trouver d'autres membres du groupe proposé.
[35] De l'avis du Tribunal, les demandeurs se révèlent des représentants adéquats. Ils comprennent leur rôle, ainsi que les tenants et aboutissants de l'action proposée ${ }^{27}$, se prêtent de bonne foi aux interrogatoires invasifs, dévoilent leur situation personnelle et médicale, se rendent disponibles pour l'audience sur l'autorisation, et ne sont pas en conflit d'intérêts. En outre, le fait que la demande ait été pilotée par leurs avocats, ou que les demandeurs s'en remettent à leur expertise, ne peut leur être reproché ${ }^{28}$.

### 3.3 Article 575, al. 3 C.p.c. : la non-application des règles sur le mandat d'ester en justice pour le compte d'autrui ou sur la jonction d'instance

[36] L'action collective ne peut servir à contourner les exigences relatives au mandat pour ester en justice pour le compte d'autrui ou à la jonction d'instances. Bayer ne réfute pas le fait que cette condition soit remplie.
[37] La satisfaction de ce critère ne pose ici aucune difficulté. De toute évidence, la nature confidentielle des informations médicales des utilisatrices de Yaz et Yasmin rend difficile la tâche de trouver leurs noms et coordonnées. L'action collective s'avère donc indiquée dans le présent recours.

### 3.4 Article 575, al. 1 C.p.c.: les questions de droit ou de faits identiques, similaires ou connexes

[38] Décider si l'action soulève " des questions de droit ou de fait identiques, similaires ou connexes " consiste à déterminer si les réclamations des membres du

[^7]groupe présentent un dénominateur commun, soit s'il existe une ou plusieurs questions communes. Le seuil requis pour satisfaire ce critère s'avère peu élevé, et la présence d'une seule question de droit identique, similaire ou connexe suffit, malgré les circonstances variables d'un membre à l'autre, pourvu que son importance soit susceptible d'influencer le sort de l'action. Dans cet esprit, il faut se garder d'évaluer prématurément les moyens de défense.
[39] Connaissant les enseignements de l'arrêt Vivendi², Bayer s'en remet à la discrétion du Tribunal sur l'observance du critère des questions de droit ou de faits identiques, connexes ou similaires.
[40] En l'instance, les questions communes proposées s'attaquent aux prétendues fautes de Bayer d'une part dans la conception, l'élaboration de la formule, la fabrication, la transformation, la commercialisation, la promotion, l'inspection, l'emballage, la préparation, l'étiquetage, les essais, la distribution, la mise en marché et la vente de Yaz et Yasmin, et d'autre part, dans l'omission d'une mise en garde contre les risques accrus de conséquences graves, comprenant les thromboses, les caillots, les embolies pulmonaires, les crises cardiaques, les accidents vasculaires cérébraux, les troubles et infections de la vésicule biliaire, l'insuffisance hépatique, l'insuffisance rénale, l'anxiété sévère, la dépression, et la mort subite. Le Tribunal conclut, sans hésitation, que la condition des questions de droit ou de faits identiques, connexes ou similaires se trouve amplement satisfaite.
[41] Par ailleurs, Bayer soumet que si le Tribunal autorise l'action collective, les questions communes proposées au paragraphe 49 de la demande doivent être reformulées selon sa propre proposition. Elle fait valoir que :

- les questions sur la causalité générale et les fautes [par. 49a) à 49g) de la demande] sont redondantes, font appel à des notions de common law, ou portent sur des éléments non allégués de manière précise à la demande. À cet égard, elle signale les questions portant sur l'efficacité de Yaz et Yasmin, ainsi que sur les risques accrus concernant sept des onze problèmes de santé mentionnés;
- les questions sur la causalité individuelle et les dommages compensatoires [par. 49h) à 49l) de la demande] : Bayer y consent;
- la question sur la restitution des profits [par. 49m) de la demande] est inadéquate puisque ce remède n'est pas ouvert en droit québécois en matière de responsabilité civile extracontractuelle, comme en l'instance. Les demandeurs en conviennent et retirent cette question;
- la formulation de la question sur les dommages punitifs est inadéquate, parce qu'elle réfère à une notion inutile.

[^8][42] Le recours des demandeurs se fonde sur la prétendue violation par Bayer de l'article 53 de la Loi sur la protection du consommateur ${ }^{30}$, ainsi que des articles 1457, 1468, 1469 et 1473 C.c.Q. Pour l'essentiel, ils lui reprochent le défaut de s'être assurée de la nature sécuritaire de Yaz et Yasmin, le manque d'information adéquate sur les risques accrus de conséquences graves liées à leur utilisation à la différence d'autres contraceptifs oraux [par. 11, 11.2, 16.6, 16.10 et 20a) de la demande], ainsi que des représentations trompeuses sur leur efficacité et leur nature sécuritaire [par. 17, 19.1 à 19.7 et 20b) de la demande]. Seules les questions qui touchent à la théorie de la cause des demandeurs et qui renvoient à des allégations précises sur la causalité générale, les fautes, la causalité individuelle, ainsi que sur les dommages-intérêts compensatoires et punitifs seront retenues.
[43] Bayer a raison de proposer la radiation totale ou partielle de certaines questions, ou leur reformulation. Ainsi, la mention des caillots, des crises cardiaques, de l'insuffisance hépatique, de l'insuffisance rénale, de l'anxiété sévère, de la dépression, et de la mort subite dans les risques accrus de conséquences graves n'est pas pertinente, car aucune allégation précise de faits pouvant être tenus pour avérés ne supporte cet énoncé. Qui plus est, les demanderesses n'ont pas connu ces conséquences. De plus, la question de l'efficacité de Yaz et Yasmin, en comparaison avec d'autres contraceptifs oraux, ne fait pas l'objet d'une preuve et n'a pas été discutée.
[44] Aussi, le Tribunal IDENTIFIE comme suit les principales questions de faits et de droit qui seront traitées collectivement :

1) Est-ce que Yasmin ou Yaz causent des risques accrus de thrombose artérielle, de thromboembolie veineuse ou de maladie de la vésicule biliaire comparativement aux autres contraceptifs oraux disponibles?
2) Dans l'affirmative, Bayer a-t-elle commis une faute génératrice de responsabilité en n'informant pas adéquatement les membres du groupe et/ou leurs médecins des risques accrus liés à l'utilisation de Yasmin et/ou Yaz? Si oui, quand?
3) Bayer a-t-elle commis une faute génératrice de responsabilité en effectuant des représentations trompeuses auprès des membres du groupe et/ou de leurs médecins concernant la nature sécuritaire de Yasmin et/ou Yaz? Si oui, quand?
4) Les fautes reprochées à Bayer ont-elles causé des préjudices aux membres du Groupe?
5) Si la responsabilité de Bayer est établie, les membres du groupe ont-ils droit à des dommages-intérêts compensatoires corporels, moraux et matériels?

[^9]6) Les membres du groupe ont-ils le droit de recouvrer les frais médicaux engagés pour le dépistage, le diagnostic et le traitement des problèmes médicaux causés par la prise de Yasmin et/ou Yaz?
7) Les membres du groupe ont-ils le droit de recouvrer à titre de dommages-intérêts un montant égal au prix d'achat de Yasmin et/ou Yaz ou à une partie du prix d'achat?
8) Les membres du groupe ont-ils droit à des dommages punitifs?
[45] Quant au groupe proposé, il convient de restreindre sa définition à celle que suggère Bayer, pour préciser que les seules utilisatrices de Yaz et Yasmin qui en seront membres seront celles qui ont reçu un diagnostic, par opposition à toutes les consommatrices. Les demandeurs consentent à cette précision.
[46] Enfin, quant aux conclusions recherchées, Bayer plaide que celles visant la restitution des profits et le recouvrement collectif de dommages compensatoires sont inadéquates. Les demandeurs répliquent qu'il est prématuré de décider, à ce stade-ci, du type de recouvrement. Ils ont raison ${ }^{31}$. En conséquence, le Tribunal retiendra les conclusions recherchées par les demandeurs, à l'exception de celle visant la restitution des profits.

## POUR CES MOTIFS, LE TRIBUNAL :

[47] ACCUEILLE en partie la demande re-re-re-modifiée pour autorisation d'exercer une action collective;
[48] AUTORISE l'exercice de l'action collective sous la forme d'une demande introductive d'instance en dommages-intérêts;
[49] ATTRIBUE aux demandeurs Janie Guindon, Geneviève Gladu et Julien Leboeuf le statut de représentants aux fins d'exercer l'action collective pour le compte des personnes membres du groupe suivant :

Toutes les personnes résidant au Québec, incluant leurs successeurs, ayants droit, membres de leurs familles et personnes à charge, qui se sont fait prescrire et ont utilisé les médicaments YASMIN et/ou YAZ, depuis leur introduction respective sur le marché ( 10 décembre 2004 dans le cas de Yasmin et 6 janvier 2009 dans le cas de $Y a z$ ) et la date du 30 novembre 2011, et qui ont reçu un diagnostic de thrombose veineuse profonde, d'embolie pulmonaire, de thromboembolie artérielle ou de la maladie de la vésicule biliaire.

All persons residing in Quebec, including their successors, assigns, family members, and dependants, who were prescribed and ingested the drugs Yasmin and/or Yaz, from the respective introductions of these drugs into the market

[^10](December 10, 2004, in respect of Yasmin and January 6, 2009, in respect of YAZ) and the date of November 30, 2011, and who were diagnosed with deep vein thrombosis, pulmonary embolism, arterial thromboembolism or gallbladder disease.
[50] IDENTIFIE comme suit les principales questions de faits et de droit qui seront traitées collectivement:

1) Est-ce que Yasmin ou Yaz causent des risques accrus de thrombose artérielle, de thromboembolie veineuse ou de maladie de la vésicule biliaire comparativement aux autres contraceptifs oraux disponibles?
2) Dans l'affirmative, Bayer a-t-elle commis une faute génératrice de responsabilité en n'informant pas adéquatement les membres du groupe et/ou leurs médecins des risques accrus liés à l'utilisation de Yasmin et/ou Yaz? Si oui, quand?
3) Bayer a-t-elle commis une faute génératrice de responsabilité en effectuant des représentations trompeuses auprès des membres du groupe et/ou de leurs médecins concernant la nature sécuritaire de Yasmin et/ou Yaz? Si oui, quand?
4) Les fautes reprochées à Bayer ont-elles causé des préjudices aux membres du Groupe?
5) Si la responsabilité de Bayer est établie, les membres du groupe ont-ils droit à des dommages-intérêts compensatoires corporels, moraux et matériels?
6) Les membres du groupe ont-ils le droit de recouvrer les frais médicaux engagés pour le dépistage, le diagnostic et le traitement des problèmes médicaux causés par la prise de Yasmin et/ou Yaz?
7) Les membres du groupe ont-ils le droit de recouvrer à titre de dommages-intérêts un montant égal au prix d'achat de Yasmin et/ou Yaz ou à une partie du prix d'achat?
8) Les membres du groupe ont-ils droit à des dommages punitifs?
[51] IDENTIFIE comme suit les conclusions recherchées qui s'y rattachent :
GRANT the class action of Petitioners and each of the members of the class;
DECLARE the Respondent liable for the damages suffered by the Petitioners and each of the members of the class;

CONDEMN the Respondent to pay to each member of the class a sum to be determined in compensation of the damages suffered;

CONDEMN the Respondent to reimburse to each of the members of the class, the purchase price of the product;

CONDEMN the Respondent to pay to each of the members of the class punitive damages;

CONDEMN the Respondent to pay interest and additional indemnity on the above sums according to law from the date of service of the motion to authorize a class action;

CONDEMN the Respondent to bear the costs of the present action including expert, notice fees and the fees relating to administering the plan of distribution of the recovery in this action;

RENDER any other order that this Honourable court shall determine and that is in the interest of the members of the class.
[52] DÉCLARE qu'à moins de demande d'exclusion, les membres du Groupe seront liés par tout jugement à intervenir sur l'action collective de la manière prévue à la loi;
[53] FIXE le délai d'exclusion à soixante (60) jours après la date de publication de l'avis aux membres, délai à l'expiration duquel les membres du Groupe qui ne se seront pas prévalus des moyens d'exclusion seront liés par tout jugement à intervenir sur l'action collective de la manière prévue à la loi;
[54] DÉTERMINE que l'action collective sera exercée dans le district judiciaire de Montréal;
[55] CONVOQUE les parties à une date à être fixée ultérieurement pour l'approbation de l'avis aux membres devant être publié conformément aux articles 579 C.p.c. et 581 C.p.c.
[56] FRAIS DE JUSTICE à suivre.


Me Samy Elnemr
Ancien avocat des demandeurs
Me Caroline Perrault, Me Erika Provencher
Siskinds, Desmeules, Avocats, s.e.n.c.r.I
Avocatesdes demandeurs

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PAGE: 17
Me Sylvie Rodrigue
Me Marie-Eve Gingras
Société d'avocats Torys, s.e.n.c.r.I.
Avocates de la défenderesse
Dates d'audiences : 29 et 30 janvier 2018

## ANNEXE 2

CANADA
PROVINCE OF QUEBEC DISTRICT OF MONTREAL

NO: 500-06-000484-093
(Class Action) SUPERIOR COURT

JANIE GUINDON
and
GENEVIÈVE GLADU
and

JULIEN LEBOEUF

Plaintiffs
V.

BAYER INC.
Defendant

# RE-RE-AMENDED MOTION TO AUTHORIZE THE BRINGING OF A CLASS ACTION \&TO ASCRIBE THE STATUS OF REPRESENTATIVES 

(Art. 1002 C.C.P. and following)

# TO THE HONOURABLE JUSTICE OF THE SUPERIOR COURT, GUYLĖNE BEAUGÉ, SITTING IN AND FOR THE DISTRICT OF MONTREAL, YOUR PLAINTIFFS STATE AS FOLLOWS: 

## I. GENERAL PRESENTATION

## A) The Action

1. Plaintiffs wish to institute a class action on behalf of the following group, of which they are members, namely:
«All persons residing in Quebec who were prescribed and ingested the drugs YASMIN and/or YAZ, from the respective introductions of these drugs into the market (December 10, 2004, in respect of Yasmin and January 6, 2009, in respect of YAZ) and the date of November 30, 2011 and their successors, assigns, family members, and dependants or any other group to be determined by the Court.»

## B) The Defendant

2. [...];
3. Bayer Inc. ("Bayer") is a Federal corporation with its head office in Etobicoke, Ontario. Bayer is a wholly owned subsidiary of Bayer A.G. Bayer is involved in marketing, distribution and sale of healthcare and material science products and has a principal establishment in Montreal, the whole as appears from the Information sheet on the Registraire des entreprises du Quebec, a copy of which is produced herewith as Exhibit P1. At all material times, Bayer was engaged in the business of designing, manufacturing, developing the formula for, preparing, processing, inspecting, testing, packaging, promoting, marketing, distributing, labelling, and/or selling for a profit, either directly or indirectly through an agent, affiliate, predecessor or subsidiary, Yasmin and Yaz in Canada. The development of Yasmin and Yaz for sale in Canada, the conduct of clinical studies, the preparation of regulatory applications, the maintenance of regulatory records, the labelling and promotional activities regarding Yasmin and Yaz, and other actions central to the allegations of this lawsuit, were undertaken by Bayer in Quebec and elsewhere;
4. [...];
5. [...];
5.1 [...];
5.2 [...];
5.3[...];
5.4[...];
5.5[...];
5.6 [...];
6. [...];

## C) The Situation

6.1 Yasmin and Yaz are oral contraceptives manufactured by Bayer, indicated in Canada for the prevention of pregnancy and treatment of moderate acne vulgaris in women (16 years of age or older for Yasmin and 14 years of age or older for Yaz) who have no known contraindications to oral contraceptive therapy, desire contraception, and have achieved menarche
the whole as appears from the product monographs, copies of which are produced herewith as Exhibit P-2 (Yasmin) and Exhibit P-3 (Yaz);
6.2 Yasmin was approved by Health Canada on December $10^{\text {th }}, 2004$ and Yaz was approved by Health Canada in late 2008;
6.3 Yasmin and Yaz are two (2) of the largest selling contraceptives worldwide. Yasmin was the third most prescribed oral contraceptive in Canada in 2008. Worldwide sales of Yasmin and Yaz in 2008 were approximately $\$ 1.8$ billion;
7. Yasmin and Yaz are combination oral contraceptives ("COCs"), meaning that they contain an estrogen component and a progestin component. Together, these steroidal components work together in COCs to suppress ovulation, fertilization, and implantation and thus prevent pregnancy;
8. [...];
9. The estrogen component in Yasmin and Yaz is known generically as ethinyl estradiol. The progestin component is known as drospirenone. Yasmin contains 0.03 milligrams of ethinyl estradiol and Yaz contains 0.02 milligrams of ethinyl estradiol. Both drugs contain 3 milligrams of drospirenone;
10. The difference between Yaz / Yasmin and other birth control pills on the market is that drospirenone is a new type of progestin and is unlike any other on the market. Drospirenone is considered to be a fourth-generation progestin;

## C.1) THE RISKS

11. Since Yasmin and Yaz contain the progestin drospirenone, they present additional health risks not associated with other birth control pills;
11.1 Drospirenone is a spironolactone analog and can cause elevation of potassium levels (hyperkalemia) and a decrease in sodium levels (hyponatremia) due to its potassium-sparing diuretic effects. Potassium is a key control in the electrical system of the heart and elevated levels can cause arrhythmias which can lead to stroke, deep vein thrombosis, pulmonary embolism, heart attack, or sudden death. Because drospirenone can act like a diuretic, it can also cause dehydration which can lead to kidney stones and gall bladder disease and/or removal;
11.2 Because drospirenone is used as the progestin component, the risk of suffering from stroke, deep vein thrombosis, pulmonary embolism, heart attack, or gall bladder disease and/or removal, is substantially higher
among women who use Yasmin or Yaz compared to women who use second generation oral contraceptives with a first or second generation progestin component;
12.[...];
12. [...];
14.[...];
13. [...];
14. Further, because of the combination of estrogen and drospirenone found in Yaz and Yasmin, they can affect a woman's hormonal level in a way that previous classes of birth control pills did not, and can also cause bouts of severe anxiety, depression and other mental health issues;
16.1 During the brief time that Yasmin and Yaz have been sold, hundreds of reports of injury and death have been reported to health regulatory agencies in association with these products;
16.2 On or about April $13^{\text {th }}$ 2002, the British Medical Journal reported that the Dutch College of General Practitioners recommended that second generation birth control pills be prescribed in lieu of Yasmin, due to the adverse event reports of forty (40) women who experienced venous thrombosis associated with their use of Yasmin, the whole as appears from the British Medical Journal article dated April 13 ${ }^{\text {th }}, 2002$, a copy of which is produced herewith as Exhibit P-4;
16.3 On or about February $1^{\text {st }}, 2003$, the British Medical Journal published a paper entitled Thromboembolism Associated with the New Contraceptive Yasmin. This paper stated that the Dutch spontaneous reporting system for adverse drug reactions received five (5) reports of thromboembolism (including death) as a suspected adverse drug reaction to the new oral contraceptive Yasmin, the whole as appears from the British Medical Journal paper dated February $1^{\text {stt }}, 2003$, a copy of which is produced herewith as Exhibit P-5;
16.4 On or about August $13^{\text {th }}$ 2009, the British Medical Journal published a study stating that oral contraceptives containing drospirenone (Yasmin and Yaz) carry a 6.3 times increased risk of deep vein thrombosis or pulmonary embolism. When compared to women taking some other type of birth control, the increased risk was nearly four (4) times more among users of Yasmin and Yaz, the whole as appears from the British Medical Journal study, a copy of which is produced herewith as Exhibit P-6;
16.5 Notwithstanding the well documented safety hazards associated with using Yasmin and Yaz, Bayer failed to conduct meaningful post-market surveillance;
16.6 Bayer aggressively marketed Yasmin and Yaz without adequately disclosing the increased safety hazards associated with using Yasmin and Yaz as compared to second generation oral contraceptives;
16.7 At all materials times, Bayer knew or should have known that the risks of using Yasmin and/or Yaz included severe and life threatening complications and side effects;
16.8 At all material times, Bayer, through its servants and agents, failed to adequately warn physicians and consumers, including the Plaintiffs and putative class members, that the risk of developing adverse events including stroke, deep vein thrombosis, pulmonary embolism, heart attack, gall bladder disease and/or removal, liver failure, kidney failure, severe anxiety, depression or sudden death associated with using Yasmin and/or Yaz is significantly higher compared to the risk of developing stroke, deep vein thrombosis, pulmonary embolism, heart attack, gall bladder disease liver failure, kidney failure, severe anxiety, depression or sudden death associated with the use of second generation oral contraceptives;
16.9 Bayer did not provide adequate safety data to Health Canada with respect to Yasmin and Yaz. Bayer knew or should have known that Yasmin and Yaz were unsafe, defective, unreasonably dangerous, and not fit for their intended purpose;
16.10 At all material times, Bayer, through its servants and agents, negligently and/or carelessly marketed, distributed and/or sold Yasmin and Yaz without adequate warnings of the products' serious side effects and unreasonably dangerous risks;
15. In addition, Bayer marketed Yasmin and Yaz as providing the same efficacy as other birth control pills in preventing pregnancy, but with additional benefits;
16. Bayer promoted Yaz as an oral contraceptive, which also reduced menstrual symptoms such as headaches, cramps and breast tenderness. In addition, Yaz is promoted as treating acne and counteracting water retention, resulting in less bloating;
17. [...];
19.1 The Food and Drug Association ("FDA") in the United States sent Bayer warning letters regarding their aggressive and controversial marketing efforts. Bayer has been warned at least three (3) times by the FDA, in 2003, 2008 and 2009, for misleading the public through the use of ads which overstate the efficacy of Yasmin and Yaz, and minimize serious risks associated with the drugs. Most recently, the FDA issued Bayer a warning letter for overstating Yaz' ability to improve womens' moods and clear up acne in television commercial advertisements. In addition, the FDA required Bayer to run a multi-million dollar television advertisement campaign to correct these misleading claims, as well as disclose the risks of hyperkalemia and other health problems associated with Yaz use. The FDA also directed Bayer to address false claims that Yasmin and Yaz were approved to treat Premenstrual Syndrome and all forms of acne, the whole as appears from the Food and Drug Administration letter dated March $26^{\text {th }}, 2009$, a copy of which is produced herewith as Exhibit P-7;
19.2 A Bayer press release dated January 20 th, 2009, issued in Canada, which targeted "Gen Yers", states that Yaz may help reduce the symptoms experienced around the time of their period, although Yaz is not indicated for that use and has not been shown to be effective for that use. The press release includes a quote from a family physician stating "The availability of this new low-dose pill provides women with the benefits of reduced menstrual symptoms." Similar to the advertising in the U.S. that the FDA took issue with, the Canadian press release also states that Yaz treats acne, but does not specify the type of acne it is indicated to treat. The press release also states that Yaz was found to be safe and well tolerated without warning of the increased risks associated with Yaz use compared to second generation oral contraceptives, the whole as appears from the Bayer press release dated January 20 ${ }^{\text {th }}$, 2009, a copy of which is produced herewith as Exhibit P-8;
19.3 On March $26^{\text {th }}, 2010$, Bayer announced it would be updating the Yasmin label in the European Union to include the results of recent epidemiological studies with respect to venous thromboembolism, the whole as appears from the Bayer press release dated March 26 ${ }^{\text {th }}, 2010$, a copy of which is produced herewith as Exhibit P-9;
19.4 On April $7^{\text {th }}, 2010$, the FDA approved new label changes for Yasmin and Yaz in the United States with respect to the risk of blood clots, the whole as appears from the Bayer letter and labels of Yasmin and Yaz, a copy of which is produced herewith as Exhibit P-10;
19.5 In Bayer's Interim Report First Quarter of 2015, it is stated that as of April 2015, there were about 4,600 pending lawsuits and claims in the United States, excluding claims already settled, the total of which is not indicated, alleging personal injuries, some fatal, related to the use of

Yasmin and Yaz, the whole as appears from the Interim Report First Quarter of 2015 dated April 27 ${ }^{\text {th }}$, 2015, a copy of which is produced herewith as Exhibit P-11;
19.6 On May $17^{\text {th }}, 2011$, a research paper published in the Canadian Medical Association Journal concluded that women using oral contraceptives containing drospirenone had a significantly increased risk of gallbladder disease, the whole as appears from the research paper published in the Canadian Medical Association Journal dated May 17 ${ }^{\text {th }}, 2011$, a copy of which is produced herewith as Exhibit P-12;
19.7 On October $18^{\text {th }}, 2012$, an article published on the Science Daily web site referred to a Food and Drug Administration-funded study led by the Kaiser Permanente Northern California Division of Research which found an increased risk of arterial thrombotic events associated with drospirenone-containing birth control pills, the whole as appears from the Science Daily article dated October 18 ${ }^{\text {th }}$, 2012, a copy of which is produced herewith as Exhibit P-13;
20. In view of the foregoing, Bayer has:
a) misrepresented information concerning the safety and efficacy of Yasmin and Yaz to the medical community and the public; and
b) failed to provide adequate warning to the medical community and the public about Yasmin and Yaz's increased risk of serious adverse events, including deep vein thrombosis, blood clots, pulmonary embolism, heart attacks, stroke, gallbladder problems and infections, liver failure, kidney failure, severe anxiety, depression, and sudden death;

## II. FACTS GIVING RISE TO AN INDIVIDUAL ACTION BY THE PLAINTIFFS

21.[...];
22. [...];
23. [...];
24. [...];
25. [...];
26. [...];
27. [...];
28. [...];
29. [...];
30. [...];
31. [...];
32. [...];
33. [...];

## Plaintiff Janie Guindon

33.1 On or about August $1^{\text {st }}$, 2009, Plaintiff Janie Guindon began using the oral contraceptive Yaz;
33.2 Plaintiff Janie Guindon was 22 years of age when she began using the oral contraceptive Yaz;
33.3 Plaintiff Janie Guindon used the oral contraceptive Yaz in accordance with the manner it was intended to be used;
33.4 Shortly after her first use of the oral contraceptive Yaz, on or about October $14^{\text {th }} 2009$, Plaintiff was told she had developed gallstones;
33.5 On or about November $14^{\text {th }}$, 2009, Plaintiff Janie Guindon had her gallbladder removed;
33.6 On or about December $30^{\text {th }}$, 2009, Plaintiff Janie Guindon suffered from deep vein thrombosis;
33.7 On or about January $1^{\text {st }}, 2010$, Plaintiff Janie Guindon suffered from multiple pulmonary embolism;
33.8 On or about January $1^{\text {stt }}, 2010$, Plaintiff Janie Guindon stopped taking Yaz;
33.9 Plaintiff Janie Guindon was in good health prior to her use of Yaz;
33.10 In the period before and during the use of Yaz by the Plaintiff Janie Guindon, she received no or inadequate warnings about the increased risk of developing stroke, deep vein thrombosis, pulmonary embolism, heart attack, or gall bladder disease and/or removal associated with Yaz use as compared to the use of second generation oral contraceptives;
33.11 Plaintiff Janie Guindon would not have taken Yaz if Bayer had properly disclosed the true risks and benefits of taking this medication;
33.12 Plaintiff's damages are a direct and proximate result of her use of the drug Yaz, Bayer's negligence and/or fault and/or lack of adequate warnings, and Bayer's misrepresentations as to its efficacy;
33.13 In consequence of the foregoing, Plaintiff Janie Guindon is justified in claiming damages;

## Plaintiffs Geneviève Gladu and Julien Leboeuf

33.14 Plaintiff Geneviève Gladu was prescribed the oral contraceptive Yasmin shortly after it was approved by health Canada in 2004;
33.15 Plaintiff Geneviève Gladu used the oral contraceptive Yasmin until June of 2009;
33.16 Plaintiff Geneviève Gladu used Yasmin in accordance with the manner it was intended to be used;
33.17 On or about June 2009, Plaintiff Geneviève Gladu experienced abdominal pains;
33.18 Between June $7^{\text {th }}, 2009$ and July $7^{\text {th }}, 2009$, when she was 30 years of age, Plaintiff Geneviève Gladu was hospitalized for gallstones, gallbladder removed, pancreatitis and pulmonary embolism;
33.19 On or about June $7^{\text {th }}$ 2009, Plaintiff Geneviève Gladu stopped taking Yasmin;
33.20 Plaintiff Geneviève Gladu was in excellent health prior to her use of Yasmin;
33.21 In the period before and during the use of Yasmin by the Plaintiff Geneviève Gladu, she received no or inadequate warnings about the increased risk of developing stroke, deep vein thrombosis, pulmonary embolism, heart attack, or gall bladder disease and/or removal associated with Yasmin use as compared to use of second generation oral contraceptives;
33.22 Plaintiff Geneviève Gladu would not have taken Yasmin if Bayer had properly disclosed the true risks and benefits of taking this medication;
33.23 Plaintiff's damages are a direct and proximate result of her use of the drug Yasmin, Bayer's negligence and/or fault and/or lack of adequate warnings, and Bayer's misrepresentations as to its efficacy;
33.24 In consequence of the foregoing, Plaintiff Geneviève Gladu is justified in claiming damages;
33.24.1. Plaintiff Julien Leboeuf has been the partner of Plaintiff Geneviève Gladu for the past ten years;
33.24.2. Plaintiffs Julien Leboeuf and Geneviève Gladu have two children;
33.24.3. Following the hospitalization of Plaintiff Geneviève Gladu in 2009, as described above, Plaintiff Julien Leboeuf suffered damages such as stress, fear of losing his partner and worry about the short and long term health of his partner;
[...]
33.25 [...];
33.26 [...];
33.27 [...];
33.28 [...];
33.29 [...];
33.30 [...];
33.31 [...];
33.32 [...];
33.33 [...];
33.34 [...];

## III. FACTS GIVING RISE TO AN INDIVIDUAL ACTION BY EACH OF THE MEMBERS OF THE GROUP

34. Every member of the class has either ingested and/or purchased Yaz and/or Yasmin or is the successor, family member, assign, and/or dependant of a person who purchased and/or ingested one of the aforementioned drugs;
35. The class members' damages would not have occurred but for the acts and/or omissions and/or fault of Bayer in failing to ensure that the drugs Yaz and Yasmin were safe for use, for failing to provide adequate warning of the risks associated with using them, and for over-promoting (and misrepresenting) their efficacy;
36. In consequence of the foregoing, each member of the class is justified in claiming at least one or more of the following as damages:
a. physical and mental injuries, including pain, suffering, anxiety, fear, loss of quality and enjoyment of life, and increased risk of health problems;
b. out-of-pocket expenses incurred or to be incurred, including those connected with hospital stays, medical treatment, life care, medications, medical monitoring services, and the diagnosis and treatment of Yaz and Yasmin side effect services;
c. Ioss of income and loss of future income;
d. refund of the purchase price of Yaz and Yasmin or alternately, the incremental costs of Yaz and Yasmin as paid for by class members;
e. disgorgement of all profits earned by Bayer from the sale of the drugs Yaz and Yasmin;
f. punitive damages;
37. As a direct result of the Bayer's conduct and/or fault, the users' family members, and dependants have, had, and/or will suffer damages and loss, including:
a. out of pocket expenses, including paying or providing nursing, housekeeping and other services;
b. loss of income and loss of future income;
c. loss of support, guidance, care, consortium, and companionship that they might reasonably have expected to receive if the injuries had not occurred;
38. [...];
39. All of these damages to the class members are a direct and proximate result of their use of the drug Yaz and/or Yasmin, Bayer's negligence and/or fault and/or lack of adequate warnings, and Bayer's misrepresentations as to its efficacy;

## IV. CONDITIONS REQUIRED TO INSTITUTE A CLASS ACTION

A) The composition of the class renders the application of Articles 59 or 67 C.C.P. difficult or impractical
40. Plaintiffs are unaware of the specific number of persons who took and/or purchased these drugs, however, it is safe to estimate that it is in the tens of thousands (if not hundreds of thousands);
41. Class members are numerous and are scattered across the entire province;
42. Plaintiffs have no way of knowing the names and addresses of potential class members due to the confidential nature of medical and pharmacy records;
43. In addition, given the costs and risks inherent in an action before the courts, many people will hesitate to institute an individual action against Bayer. Even if the class members themselves could afford such individual litigation, the court system could not as it would be overloaded. Further, individual litigation of the factual and legal issues raised by the conduct of Bayer would increase delay and expense to all parties and to the court system;
44. Also, a multitude of actions instituted in different judicial districts, risks having contradictory judgements on questions of fact and law that are similar or related to all members of the class;
45. These facts demonstrate that it would be impractical, if not impossible, to contact each and every member of the class to obtain mandates and to join them in one action;
46. In these circumstances, a class action is the only appropriate procedure for all of the members of the class to effectively pursue their respective rights and have access to justice;
B) The questions of fact and law which are identical, similar, or related with respect to each of the class members with regard to Bayer and that which the Plaintiffs wish to have adjudicated upon by this class action
47. Individual questions, if any, pale by comparison to the numerous common questions that predominate;
48. The damages sustained by the class members flow, in each instance, from a common nucleus of operative facts, namely, Bayer's misconduct;

49．The recourses of the members raise identical，similar or related questions of fact or law，namely：
a．Do Yaz and Yasmin cause，exacerbate，or contribute to serious adverse events，including deep vein thrombosis，blood clots， pulmonary embolism，heart attacks，stroke，gallbladder problems and infections，liver failure，kidney failure，severe anxiety， depression，and sudden death？
b．Was Bayer negligent and／or did it commit a fault and／or did it fail in its duty of safety，duty of care，and／or duty to inform imposed upon it as manufacturer，distributer and／or seller of Yaz and Yasmin？
c．Do Yaz and Yasmin possess a superior efficacy over other contraceptives available on the market？
d．Did Bayer knowingly，recklessly or negligently breach a duty to warn class members and／or their physicians of the risks of harm from the use of Yaz and Yasmin？
e．Did Bayer knowingly，recklessly or negligently misrepresent to class members and／or their physicians the risks and benefits from the use of Yaz and Yasmin？
f．Did Bayer engage in false advertising when it represented，through advertisements，promotions and other representations，that Yaz and Yasmin were safe？
g．Did Bayer engage in false advertising when it represented，through advertisements，promotions and other representations，that Yaz and Yasmin had a superior efficacy over other contraceptions？
h．In the affirmative to any of the above questions，did Bayer conduct engage its liability towards the members of the class？
i．If the responsibility of the Bayer is established，what is the nature and the extent of damages and other remedies to which the members of the class can claim？
j．Are members of the class entitled to bodily，moral，and material damages？
k．Are members of the class entitled to recover the medical costs incurred in the screening，diagnosis and treatment of medical conditions caused by taking Yaz and Yasmin？
I. Are the members of the class entitled to recover as damages an amount equal to the purchase price of Yaz and Yasmin or any part of the purchase price?
m . Should Bayer be ordered to disgorge all or part of its ill-gotten profits received from the sale of Yaz and Yasmin?
$n$. Are members of the class entitled to aggravated or punitive damages?
50. The interests of justice favour that this motion be granted in accordance with its conclusions;

## V. NATURE OF THE ACTION AND CONCLUSIONS SOUGHT

51. The action that Plaintiffs wish to institute on behalf of the members of the class is an action in damages;
52. The conclusions that Plaintiffs wish to introduce by way of a motion to institute proceedings are:

GRANT the class action of Plaintiffs and each of the members of the class;
DECLARE the Defendant liable for the damages suffered by the Plaintiffs and each of the members of the class;

CONDEMN the Defendant to pay to each member of the class a sum to be determined in compensation of the damages suffered, and ORDER collective recovery of these sums;

CONDEMN the Defendant to reimburse to each of the members of the class, the purchase price of the product, and ORDER collective recovery of these sums;

CONDEMN the Defendant to pay to each of the members of the class, punitive damages, and ORDER collective recovery of these sums;

RESERVE the right of each of the members of the class to claim future damages related to the use of Yaz and Yasmin;

CONDEMN the Defendant to pay interest and additional indemnity on the above sums according to law from the date of service of the motion to authorize a class action;

ORDER the Defendant to deposit in the office of this court the totality of the sums which forms part of the collective recovery, with interest and costs;

ORDER that the claims of individual class members be the object of collective liquidation if the proof permits and alternately, by individual liquidation;

CONDEMN the Defendant to bear the costs of the present action including expert, notice fees and the fees relating to administering the plan of distribution of the recovery in this action;

RENDER any other order that this Honourable court shall determine and that is in the interest of the members of the class;

## A) The Plaintiffs request the status of representative of the Class

53. Plaintiffs are members of the class;
54. Plaintiffs are ready and available to manage and direct the present action in the interest of the members of the class that they wish to represent and are determined to lead the present dossier until a final resolution of the matter, the whole for the benefit of the class, as well as, to dedicate the time necessary for the present action before the Courts of Quebec and the Fonds d'aide aux recours collectifs, as the case may be, and to collaborate with their attorneys;
55. Plaintiffs have the capacity and interest to fairly and adequately protect and represent the interest of the members of the class;
56. Plaintiffs have given the mandate to their attorneys to obtain all relevant information with respect to the present action and intend to keep informed of all developments;
57. Plaintiffs, with the assistance of their attorneys, are ready and available to dedicate the time necessary for this action and to collaborate with other members of the class and to keep them informed;
58. Plaintiffs are in good faith and have instituted this action for the sole goal of having their rights, as well as the rights of other class members recognized and protected so that they may be compensated for the damages that they have suffered as a consequence of the Bayer's conduct;
59. Plaintiffs understand the nature of the action;
60. The interests of the Plaintiffs are not antagonistic to those of other members of the class;
B) The Plaintiff suggests that this class action be exercised before the Superior Court of justice in the district of Montreal
61. A great number of the members of the class reside in the judicial district of Montreal and in the appeal district of Montreal;
62. Bayer has its principal place of business in the judicial district of Montreal;
63. [...];
64. The Plaintiffs' attorneys practice their profession in the judicial district of Montreal;
65. The present motion is well founded in fact and in law.

## FOR THESE REASONS, MAY IT PLEASE THE COURT:

GRANT the present motion;
AUTHORIZE the bringing of a class action in the form of a motion to institute proceedings in damages;

ASCRIBE the Plaintiffs the status of representatives of the persons included in the class herein described as:
«All persons residing in Quebec who were prescribed and ingested the drugs YASMIN and/or YAZ, from the respective introductions of these drugs into the market (December 10, 2004, in respect of Yasmin and January 6, 2009, in respect of YAZ) and the date of November 30, 2011 and their successors, assigns, family members, and dependants or any other group to be determined by the Court.»

IDENTIFY the principle questions of fact and law to be treated collectively as the following:
a. Do Yaz and Yasmin cause, exacerbate, or contribute to serious adverse events, including deep vein thrombosis, blood clots, pulmonary embolism, heart attacks, stroke, gallbladder problems and infections, liver failure, kidney failure, severe anxiety, depression, and sudden death?
b. Was Bayer negligent and/or did it commit a fault and/or did it fail in its duty of safety, duty of care, and/or duty to inform imposed upon it as manufacturer, distributer and/or seller of Yaz and Yasmin?
c. Do Yaz and Yasmin possess a superior efficacy over other contraceptives available on the market?
d. Did Bayer knowingly, recklessly or negligently breach a duty to warn class members and/or their physicians of the risks of harm from the use of Yaz and Yasmin?
e. Did Bayer knowingly, recklessly or negligently misrepresent to class members and/or their physicians the risks and benefits from the use of Yaz and Yasmin?
f. Did Bayer engage in false advertising when it represented, through advertisements, promotions and other representations, that Yaz and Yasmin were safe?
g. Did Bayer engage in false advertising when it represented, through advertisements, promotions and other representations, that Yaz and Yasmin had a superior efficacy over other contraceptions?
h. In the affirmative to any of the above questions, did Bayer conduct engage its liability towards the members of the class?
i. If the responsibility of the Bayer is established, what is the nature and the extent of damages and other remedies to which the members of the class can claim?
j. Are members of the class entitled to bodily, moral, and material damages?
k. Are members of the class entitled to recover the medical costs incurred in the screening, diagnosis and treatment of medical conditions caused by taking Yaz and Yasmin?
I. Are the members of the class entitled to recover as damages an amount equal to the purchase price of Yaz and Yasmin or any part of the purchase price?
m . Should Bayer be ordered to disgorge all or part of its ill-gotten profits received from the sale of Yaz and Yasmin?
$n$. Are members of the class entitled to aggravated or punitive damages?

IDENTIFY the conclusions sought by the class action to be instituted as being the following:

GRANT the class action of Plaintiffs and each of the members of the class;
DECLARE the Defendant liable for the damages suffered by the PLAINTIFFS and each of the members of the class;

CONDEMN the Defendant to pay to each member of the class a sum to be determined in compensation of the damages suffered, and ORDER collective recovery of these sums;

CONDEMN the Defendant to reimburse to each of the members of the class, the purchase price of the product, and ORDER collective recovery of these sums;

CONDEMN the Defendant to pay to each of the members of the class, punitive damages, and ORDER collective recovery of these sums;

RESERVE the right of each of the members of the class to claim future damages related to the use of Yaz and Yasmin;

CONDEMN the Defendant to pay interest and additional indemnity on the above sums according to law from the date of service of the motion to authorize a class action;

ORDER the Defendant to deposit in the office of this court the totality of the sums which forms part of the collective recovery, with interest and costs;

ORDER that the claims of individual class members be the object of collective liquidation if the proof permits and alternately, by individual liquidation;

CONDEMN the Defendant to bear the costs of the present action including expert, notice fees and the fees relating to administering the plan of distribution of the recovery in this action;

RENDER any other order that this Honourable court shall determine and that is in the interest of the members of the class;

DECLARE that all members of the class that have not requested their exclusion, be bound by any judgement to be rendered on the class action to be instituted in the manner provided for by law;

FIX the delay of exclusion at thirty (30) days from the date of the publication of the notice to the members, date upon which the members of the class that have not exercised their means of exclusion will be bound by any judgement to be rendered herein;

ORDER the publication of a notice to the members of the group in accordance with article 1006 C.C.P. within sixty (60) days from the judgement to be rendered herein in the JOURNAL DE QUÉBEC, the JOURNAL DE MONTRÉAL, LA PRESSE and the NATIONAL POST;

ORDER that said notice be available on the Bayer's website with a link stating "Notice to Yaz and Yasmin users";

RENDER any other order that this Honourable court shall determine and that is in the interest of the members of the class;

THE WHOLE with costs including publications fees.

Montreal, February $2^{\text {nd }}, 2017$

Sistendo Deameucles, Averado, S.E.N.C.R.L.<br>Maître Gamy Elnemr<br>samy.elnemr@siskindsdesmeules.com<br>SISKINDS, DESMEULES, AVOCATS, S.E.N.C.R.L.<br>Attorneys for the Plaintiffs<br>480, Saint-Laurent<br>Bureau 501, Montréal, Québec H2Y 3 YT<br>Telephone : 514-849-1970<br>Fax: 514-849-7934<br>Notification: notification@siskindsdesmeules.com

## NOTICE OF PRESENTATION

TO: Me Sylvie Rodrigue, Ad. E.
Société d'avocats Torys s.e.n.c.r.l.
1 place Ville-Marie
Suite 1919
Montreal, Quebec
H3B 2C3
Attorneys for the Defendant Bayer Inc.

TAKE NOTICE that the Plaintiffs' Motion will be presented for adjudication before The Honourable Justice Guylène Beaugé on a date and time to be determined by the Court at the Montréal Courthouse located at 1, Notre-Dame East, Montreal, Quebec, H2Y 1 B6.

Montreal, February $2^{\text {nd }}, 2017$

[^11]CANADA
PROVINCE OF QUEBEC DISTRICT OF MONTREAL

NO: 500-06-000484-093
(Class Action) SUPERIOR COURT

JANIE GUINDON
and
GENEVIÈVE GLADU
and

JULIEN LEBOEUF
Plaintiffs
V.

BAYER INC.
Defendant

## LIST OF EXHIBITS

EXHIBIT P-1: Bayer's Information Sheet on the Registraire des entreprises du Québec;

EXHIBIT P-2: Yasmin Product Monographs;
EXHIBIT P-3: Yaz Product Monographs;
EXHIBIT P-4: $\quad$ British Medical Journal Article, dated April 13, 2002;
EXHIBIT P-5: $\quad$ British Medical Journal Paper, dated February 1, 2003;
EXHIBIT P-6: British Medical Journal Study;
EXHIBIT P-7: Food and Drug Administration letter, dated March 26, 2009;

EXHIBIT P-8: Bayer Press Release, dated January 20, 2009;

EXHIBIT P-9: $\quad$ Bayer Press Release, dated March 26, 2010;

EXHIBIT P-10: Bayer letter and labels of Yasmin and Yaz;
EXHIBIT P-11: Interim Report First Quarter of 2015, dated April 27, 2015;
EXHIBIT P-12: Research paper published in the Canadian Medical Association Journal, dated May 17, 2011;

EXHIBIT P-13: $\quad$ Science Daily article, dated October 18, 2012.

Montreal, February $2^{\text {nd }}, 2017$

Sistende, Bemmules arocat, SIE N., ie, C.<br>Maître Samy Elnemr<br>samy.elnemr@siskindsdesmeules.com<br>SISKINDS, DESMEULES, AVOCATS, S.E.N.C.R.L.<br>Attorneys for the Plaintiffs<br>480, Saint-Laurent<br>Bureau 501, Montréal, Québec H2Y 3 Y7<br>Telephone: 514-849-1970<br>Fax: 514-849-7934<br>Notification: notification@siskindsdesmeules.com

CANADA

DISTRICT OF M
SUPERIOR COURT - CLASS ACTION
NO: $500-06-000484-093$
JANIE GUINDON

## ET AL.

Plaintiffs
BAYER INC.

Defendant | RE-RE-AMENDED MOTION TO AUTHORIZE THE |
| :---: |
| BRINGING OF A CLASS ACTION \&TO ASCRIBE |
| THE STATUS OF REPRESENTATIVES |
| (Art. 1002 C.C.P. and following), |
| NOTICE OF PRESENTATION, LIST OF EXHIBITS |
| Copy to the Defendant |
| a/s Me Sylvie Rodrigue |
| Société d'avocats Torys |
| 1 Place Ville-Marie, bureau 1919 |
| Montréal (Québec) H3B 2C3 |
| BB-6852 |
| Me Samy Elnemr |
| O/F : 67-095 | SISKINDS

## ANNEXE 3



Nature de la cause
Recours collectif

| Cote(s) | Requête (s) |
| :---: | :--- |
| 43 | Demande de ré-réamendée pour autorisation d'exercer une action collective et pour obtenir le statut de <br> représentants |


| Greffier(ière) <br> Diane Rivest | Interprète | Sténographe |
| :--- | :--- | :--- |
| N/A | N/A |  |

ENREGISTREMENT NUMÉRIQUE

| Audition AM : | Début | Fin 30 | 12 h 16 | Audition PM : | Début |
| ---: | ---: | ---: | ---: | ---: | :--- |


| Affaires référées au mâ̂tre des rôles | Résultat de l'audition <br> Cause mise en délibéré. Dossier au bureau de la juge. |
| :--- | :--- |

HEURE

## CAUSE CONTINUÉE DU 29 JANVIER 2018

OUVERTURE DE L'AUDIENCE IDENTIFICATION DES PROCUREURS

Suite de l'argumentation de Me Rodrigue
Me Rodrigue réfère à la page 26 de son plan d'argumentation
Me Rodrigue réfère à l'interrogatoire du Dr Grover
$9 h 43$
Me Rodrigue réfère à la pièce $P-12$


9h44

9h47

9h49

9h49

9h52

9h56

9h57

9h58

10h00

10h02
$10 h 07$

10h08

10h08

10h08

10h11

10h13

10h16

10h20

10h23

10h26

10h28

10h32

10h33

Me Rodrigue réfère au paragraphe 7 du rapport du Dr Grover, onglet 6
Me Rodrigue réfère au paragraphe 11 du rapport du Dr Grover
Question du Tribunal à Me Rodrigue
Me Rodrigue remet au Tribunal deux tableaux concernant les termes utilisés pour les contraceptifs oraux Yaz et Yasmin, ainsi qu'une copie de toutes les monographies de ces contraceptifs depuis 2004

Me Rodrigue réfère au tableau
Question du Tribunal à Me Rodrigue

Me Rodrigue réfère à la page 4 du tableau

Précision de Me Gingras

Me Rodrigue réfère à la page 8 du tableau

Me Rodrigue réfère à la page 11 du tableau

Question du Tribunal à Me Rodrigue

Question du Tribunal à Me Rodrigue
Me Rodrigue réfère à l'onglet 3 du compendium (Mme Guindon) et à l'onglet 4, pages 46 et 47 (Mme Gladu)
Me Rodrigue réfère le Tribunal à son compendium

Me Rodrigue réfère à la page 32 de son plan d'argumentation

Me Rodrigue réfère au rapport du Dr Masse, page 50, onglet 6

Me Rodrigue réfère aux pièces P -11 et P -12
Me Rodrigue réfère à la page 35 de son plan d'argumentation

Me Rodrigue réfère au tableau à l'Annexe 3, à la page 17

Me Rodrigue réfère aux paragraphes 103 et 104 du plan ainsi qu'à 33.12, 33.23, 35 et 39
Me Rodrigue réfère à l'allégation dans la demande au paragraphe 19.1 ainsi qu'à la pièce $\mathrm{P}-7$

Me Rodrigue réfère à la pièce P-8
Me Rodrigue réfère à la note de bas de page no 5 de la pièce $P-8$


| $10 \mathrm{h39}$ | Me Rodrigue réfère au paragraphe 122 de son plan |
| :---: | :---: |
| $10 \mathrm{h41}$ | Me Rodrigue réfère à l'Annexe 4 du plan d'argumentation |
| 10h47 | Me Rodrigue réfère à la page 40 du plan d'argumentation |
| 10h49 | Question du Tribunal là Me Rodrigue quant au risque accru |
| 10h51 | Me Rodrigue réfère à l'onglet 8 de ses autorités |
| 10h54 | Me Rodrigue réfère aux paragraphes 135 et 137 de son plan d'argumentation |
| 10 h 57 | Me Rodrigue réfère au paragraphe 142 de son plan d'argumentation |
| 10 h 58 | Me Rodrigue réfère à la pièce P-4 |
| 11 h00 | Me Rodrigue réfère à la pièce P-5 |
| 11h02 | Me Rodrigue réfère à la pièce P-6 |
| 11 h04 | Me Rodrigue réfère à la pièce $\mathrm{P}-9$ |
| 11h06 | Me Rodrigue réfère à la pièce P -13 |
| 11h09 | Me Rodrigue réfère à la pièce P-10 |
| 11 h 10 | Me Rodrigue réfère à la pièce P-19 |
| 11413 | Me Rodrigue réfère au paragraphe 156 de son plan d'argumentation |
| 11h13 | Me Rodrigue réfère au paragraphe 19.1 de la demande |
| 11h14 | Suspension |
| 11h36 | Reprise |
| 11h36 | Suite de l'argumentation de Me Rodrigue |
| 11h38 | Me Rodrigue réfère à l'article 575.4 C.p.c. |
| 11h39 | Me Rodrigue réfère au paragraphe 166 du plan |
| 11h41 | Me Rodrigue réfère aux pages 70 et 71 de l'interrogatoire de Mme Guindon |
| 11h41 | Me Rodrigue réfère à l'affaire Caron |
| 11h44 | Question du Tribunal à Me Rodrigue |



| 11h46 | PIĖCE BD-5 : Ordonnance de l'Ontario, dossier 52030/10 |
| :---: | :---: |
| 11 h 47 | PIĖCE BD-6: Ordonnance de la Saskatchewan Q.B. No. 1611 of 2009 |
| 11h48 | Question du Tribunal |
| 11448 | Me Elnemr réfère le Tribunal à l'onglet 11 pour le dossier de l'Ontario et à l'onglet 12 en liasse pour le dossier de la Saskatchewan |
| 11 h49 | Me Rodrigue réfère le Tribunal à la page 53 de son plan pour l'informer qu'elle substituera cette page pour y apporter des changements |
| 11h54 | Me Rodrigue réfère au paragraphe 178 de son plan d'argumentation |
| 11456 | Me Rodrigue réfère le Tribunal à l'onglet 12 |
| 12h00 | Me Rodrigue réfère au paragraphe 189 de son plan d'argumentation |
| 12h01 | Me Rodrigue réfère à la page 59 de son plan d'argumentation |
| 12h02 | Me Rodrigue réfère au paragraphe 194 de son plan d'argumentation |
| 12h04 | Me Rodrigue réfère à l'onglet 23 de son cahier d'autorités, paragraphe 102 |
| 12 h 06 | Me Rodrigue réfère le Tribunal aux pages 61 et 62 de son plan d'argumentation, et l'informe qu'elle substituera cette page pour y apporter des changements |
| 12h08 | Me Rodrigue remet au Tribunal une feuille affichant trois décisions jurisprudentielles |
| 12 h 09 | Me Rodrigue réfère à l'onglet 28 du cahier d'autorités de la partie demanderesse |
| 12h14 | Suspension |
| 14h16 | Reprise |
| 14 h 16 | Me Rodrigue remet au Tribunal une page remplaçant les questions communes aux pages 53 et 61, ainsi que la définition du groupe à la page 63 |
| 14h16 | Réplique de Me Elnemr |
| 14h19 | Me EInemer réfère le Tribunal à la demande, page 14 |
| 14 h 20 | La partie demanderesse amende la demande ré-ré-amendée aux paragraphes suivants : <br> - le paragraphe 49 a) est remplacé par le libellé de la question commune 1 proposée par la partie défenderesse; <br> - le paragraphe 49 m ) est retiré; <br> - au paragraphe 49 n ), le mot «aggravated» est retiré; <br> - au paragraphe 52, la conclusion suivante est retirée : « RESERVE the right of each of the members of the class to claim future damages related to the use of Yaz and Yasmin; " <br> - à la $3^{e}$ conclusion (ASCRIBE ...), SUBSIDIAIREMENT, les demandeurs acceptent la définition proposée par la partie défenderesse. |



14h26

14h27

14h29

14h30

14h33

14h34
14 h 36

14h36

14h38

14h40

14h41

14h44
$14 h 47$

14h47

14h49

14h50

14h54

14h57

15h00

15h02
$15 h 06$

15h07

15h10

Me Elnemr remet au Tribunal deux décisions jurisprudentielles: Vermette et JTI-MacDonald
Me Elnemr réfère à la décision Vermette, paragraphe 63
Me Elnemr réfère à la décision JTI-McDonald aux paragraphes 21 à 32
Question du Tribunal à Me Elnemr

Me Elnemr réfère à la déclaration assermentée du Dr Grover

Me Elnemr réfère le Tribunal à l'onglet 23 de ses autorités, paragraphe 42
Me Elnemr réfère le Tribunal à l'onglet 24 de ses autorités
Me Elnemr réfère le Tribunal à l'onglet 28 de ses autorités, paragraphes 39 et 66
Me Elnemr réfère à la pièce $P-6$, page 4

Me Elnemr réfère à la pièce P -2, page 587
Me Elnemr réfère à la pièce P -17
Me Elnemr réfère à l'onglet 10 , paragraphes $34,38,45$
Question du Tribunal à Me Elnemr

Me Elnemr réfère à l'article 53 et à l'onglet 27 de son cahier d'autorités, paragraphes 17 et 58

Question du Tribual à Me Elnemr
Me Elnemr remet au Tribunal une décision jurisprudentielle
Me Elnemr réfère à l'onglet 28 au paragraphe 70
Me Elnemr réfère à l'onglet 23 , paragraphes 27 et 52
Me Elnemr réfère à l'onglet 24, paragraphes 41 à 43

Le Tribunal s'adresse à Me Einemr
Me Elnemr réfère à l'onglet 25 , paragraphe 39
Me Elnemr réfère à l'onglet 26, paragraphes 64 et 65
Me Elnemr réfère à l'onglet 27, paragraphe 37


15h11

15h14
15h15
15h17

15 h 20

15h22
15h24
15h25

15h36

15h38

Me Elnemr réfère à l'onglet 28, paragraphe 71
Réplique de Me Rodrigue
Me Rodrigue réfère à la page 17 de la demande, questions h), i), j). k), et I)
Me Rodrigue réfère à l'Annexe 5 , page 2 de son plan d'argumentation
Le Tribunal réfère les avocats à la pièce P -2
Question du Tribunal à Me Rodrigue
Le Tribunal réfère les avocats à la pièce P - 12
Échange entre le Tribunal et Me Rodrigue
Fin de l'audience

Cause mise en délibéré. Dossier au bureau de la juge.


Diane Rivest, g.a.c.s.

## ANNEXE 4

PROVINCE DE QUÉBEC DISTRICT DE MONTRÉAL

NO : 500-06-000484-093

COUR SUPÉRIEURE
(Recours collectif)

JANIE GUINDON
-et-
GENEVIĖVE GLADU
-et-
SERGE BOUCHARD
Requérants
c.

BAYER INC.
Intimée

## DÉCLARATION SOUS SERMENT AMENDÉE DU DR ANDRÉ MASSE MD, CSPQ, FRCSC

Je, soussigné, docteur André Masse, obstétricien-gynécologue, pratiquant à l'hôpital St-Luc du Centre hospitalier de l'Université de Montréal, situé au 1058, rue Saint-Denis, Montréal (Québec) H2X 3J4, déclare solennellement ce qui suit :

1. Cette déclaration sous serment est produite suite à une demande par la Société d'avocats Torys s.e.n.c.r.l., représentant l'intimée Bayer inc. (« Bayer ») dans le cadre d'une Requête pour autorisation d'intenter un recours collectif contre elle par les requérants Janie Guindon, Geneviève Gladu et Serge Bouchard relativement aux médicaments commercialisés sous les noms de Yaz® et Yasmin®, contraceptifs oraux combinés estro-progestatif, composés d'éthinyl-oestradiol et de drospirénone.
2. Je ne connais pas et je n'ai jamais été impliqué dans le traitement ou le suivi des patientes ci-haut mentionnées. Je n'ai jamais travaillé à titre de consultant, ni participé à aucune étude clinique pour le compte de la compagnie Bayer.

## QUALIFICATIONS

3. Je suis obstétricien gynécologue de formation et professeur titulaire de clinique au département d'Obstétrique Gynécologie de l'Université de Montréal et de l'Hôpital St-Luc du CHUM. Mon curriculum vitae est joint en annexe A.

## DOCUMENTS ET DOSSIERS MÉDICAUX CONSULTÉS

4. Pour émettre cette opinion sur dossiers, j'ai consulté plusieurs dossiers et documents qui sont énoncés en annexe B. Je joins également copie des monographies concernant le Yaz(8) et le Yasmin(®) pour la période pertinente au recours en annexe $\mathbf{C}$ et annexe $D$, respectivement.

## CAS DE MADAME JANIE GUINDON

5. Madame Janie Guindon débute l'usage de $\mathrm{Yaz®}$ (Éthinyl-estradiol 20 mcg et Drospirénone 3 mg ), le 10 août 2009, à l'âge de 22 ans. Notons que le dossier mentionne l'usage de contraception orale en 2003 (Triquilar), à l'âge de 16 ans. Deux mois plus tard, le 14 octobre 2009, elle se présente à l'urgence avec une histoire compatible de colique biliaire et une échographie abdominale démontre alors une macrolithiase de $3,2 \mathrm{~cm}$. Elle subit une cholécystectomie (exérèse de la vésicule biliaire), le 3 novembre 2009. Les notes au dossier ne mentionnent pas si les contraceptifs oraux ont été cessés avant la chirurgie.
6. En décembre 2009, peu après sa chirurgie, madame Guindon se rend de Gatineau à Québec, où le 26 décembre, elle consulte à l'urgence pour une douleur à la cheville. Le médecin diagnostique une entorse. Elle consulte à nouveau le 31 décembre. Un diagnostic de thrombophlébite de la veine fémorale superficielle est posé et une anticoagulation est débutée. Quelques jours plus tard, elle consulte une troisième fois pour difficulté respiratoire et douleur pleurale. Une embolie pulmonaire est confirmée à la scintigraphie ventilation perfusion.

## Question et opinion

Les problèmes de santé allégués à l'égard de madame Guindon, soit les calculs biliaires, la cholécystectomie (résection de la vésicule biliaire), la thrombose veineuse profonde et les embolies pulmonaires auraient-ils été causés par la prise de Yaz ${ }^{(8) \text { ? }}$

## Lithiase (calcul) biliaire/cholécystectomie

7. La prévalence de lithiase vésiculaire chez la femme caucasienne nord-américaine est de l'ordre de 15\%. Une histoire familiale double ce risque. L'obésité est également un facteur de risque bien établi de lithiase vésiculaire, dû à l'augmentation de la synthèse et de I'excrétion de cholestérol. Il en est de méme pour la grossesse, en lien avec une quantité imposante d'œestrogène produite.
8. La composante oestrogénique des contraceptifs oraux estro-progestatif, pourrait augmenter légèrement le risque de formation de lithiase. Il y existe encore controverse dans la littérature à ce sujet. Les comprimés de moins de 50 mcg d'œstrogène,
presque toujours utilisés aujourd'hui, (dont le Yaz® fait partie à seulement 20 mcg d'éthinyl estradiol), n'ont probablement pas d'effet significatif sur la formation de lithiase vésiculaire. A noter que seulement 2 mois après le début de Yaz®, l'échographie chez madame Guindon démontrait un calcul de $3,2 \mathrm{~cm}$, lequel était vraisemblablement en formation depuis longtemps, soit bien avant la prise de Yaz® dans ce cas-ci. [...]

## Phénomène thrombo-embolique

9. Sans aucun facteur de risque, l'incidence de base de thrombo-embolie est de l'ordre de 4 incidents sur 10000 personnes par année (soit $0,04 \%$ ). L'usage des contraceptifs oraux estro-progestatifs quels qu'ils soient, augmente le risque de base de 2 à 3 fois (soit $0,08 \%$ à $0,12 \%$ ). Il est important de souligner que ce risque est à son maximum dans les 3-4 premiers mois de l'usage. Il n'est pas augmenté par la durée d'utilisation, de fait il diminue graduellement et retourne au risque de base, 3 mois après l'arrèt. Ce risque diminue également en fonction de la dose d'œstrogène. Rappelons que Yaz@ contient 20 mcg d'œstrogène.
10. De nombreuses études ont tenté de comparer le risque thrombo-embolique en fonction du progestatif associé à l'œestrogène (levonorgestrel, desogestrel, gestodene, norgestimate, drospirénone) dans les différentes marques de contraceptifs oraux. Ces études sont souvent controversées et arrivent à des conclusions divergentes, ce qui s'explique par la diversité des études et de leur qualité scientifique inégale.
11. Les études de meilleure qualité scientifique, sont des études prospectives, qui sont expressément conçues pour évaluer un risque déterminé. Elles doivent avoir une puissance statistique suffisante, lorsque l'effet indésirable est peu fréquent. Les facteurs de risque sont compilés de façon prospective par un suivi adéquat pour identifier et confirmer les évènements indésirables et exclure les variables confondantes.
12. Les études rétrospectives faites à partir de bases de données comportent souvent de nombreux biais et présentent davantage de faiblesses méthodologiques qui peuvent invalider les résultats et les conclusions et ont des limites importantes.
13. Conscient de la controverse dans les études des dernières années quant aux risques associés à l'usage des différents progestatifs dans les contraceptifs oraux, l'Institut National de Santé publique du Québec (INSPQ), a réuni un groupe d'experts de différentes spécialités pour évaluer ces études récentes sur ce sujet, et a émis un consensus en juin 2011. En résumé, ce groupe de travail conclut que, toutes les études disponibles comportent des faiblesses méthodologiques et que s'il existe une différence de risque de thrombo-embolie entre les contraceptifs contenant le progestatif drospirénone (progestatif de quatrième génération) et ceux contenant le progestatif lévonorgestrel (progestatif de deuxième génération), cette différence est faible, de l'ordre de 1-2 cas de plus par 10000 femmes - années et elle ne nécessite pas, dans l'état actuel des connaissances, de changer les pratiques cliniques. La

Société des Obstétriciens et Gynécologues du Canada, a émis une déclaration de principe en février 2013 qui supporte les mêmes conclusions. II n'y a donc pas de risque significatif accru à l'utilisation du Yaz ${ }^{(8)}$, comparativement à d'autres contraceptifs oraux estro-progestatifs.
14. Il est du rôle du médecin d'individualiser le traitement, d'évaluer l'état de santé des patientes et de discuter des avantages et des risques associés à l'usage de la contraception orale. Sous contraceptifs oraux, le risque absolu de thrombo-embolie demeure très faible chez les patientes en bonne santé et beaucoup moins élevé que les risques associés à une grossesse non planifiée. À titre comparatif, en grossesse et en période péri partum en raison de la compression veineuse et de l'état d'hypercoagulabilité associée à cet état, l'incidence de thrombo-embolie augmente de 5 à 50 fois par rapport au risque de base, selon l'âge maternel et l'âge gestationnel. Les chances de développer un phénomène thrombo-embolique sont donc beaucoup plus grandes en grossesse que sous contraceptifs oraux estro-progestatifs (5 à 50 fois vs 2 à 3 fois).
15. Nous devons considérer que madame Guindon mesure 5 pieds 7 pouces et pèse 266 livres: son indice de masse corporelle, (IMC) est à $41,4 \mathrm{~kg} / \mathrm{m} 2$. L'obésité ( $\mathrm{IMC}>30 \mathrm{~kg} / \mathrm{m} 2$ ) en soi, augmente le risque thrombo-embolique de 2 à 3 fois et la prise de contraceptifs oraux, chez les patientes obèses, augmente ce risque de 2 à 24 fois de plus, proportionnellement au poids. La patiente est également fumeuse. L'usage du tabac est un autre facteur de risque, si bien que les contraceptifs oraux sont déconseillés chez les fumeuses de plus de 35 ans. Une période postopératoire, l'immobilisation, le voyage en position assise prolongée, l'obésité et l'usage de la cigarette sont tous des facteurs prédisposant aux phénomènes thrombo-emboliques. De plus, l'investigation a démontré que madame Guindon est porteuse du facteur $V$ de Leiden. Cette condition génétique augmente en elle seule de 7 fois le risque de phénomène thrombo-embolique. Le bilan lipidique de madame, en août 2008, démontrait également un cholestérol total élevé, autre facteur de risque vasculaire.
16. Les patientes avec phénomène thrombo-embolique présentent souvent plusieurs facteurs de risque, dont les plus prévalants dans les études populationnelles sont: 48 heures ou plus d'immobilisation dans le dernier mois, une hospitalisation, une chirurgie, ou un processus infectieux dans les 3 derniers mois. Presque tous ces facteurs de risque, sauf le processus infectieux, sont retrouvés ici à l'histoire de madame Guindon, en plus de ses facteurs personnels, l'obésité, la cigarette, I'hypercholestérolémie et le facteur $V$ de Leiden.
17. Les contraceptifs oraux estro-progestatifs, quels qu'ils soient, augmentent le risque de base de phénomène thrombo-embolique de 2 à 3 fois. Tel que discuté, tous les facteurs de risque présents chez madame Guindon et son historique médicale personnelle (obésité, tabagisme, période postopératoire, immobilisation, voyage, facteur $V$ de Leiden, hypercholestérolémie), influencent et augmentent individuellement et collectivement, son risque thrombo-embolique. Le contraceptif Yaz ${ }^{\circledR}$, utilisé par la patiente, et contenant la drospirénone (progestatif de quatrième
génération), ne modifie pas significativement ce risque comparativement aux autres contraceptifs oraux estro-progestatifs.

## Conclusion

18. [...]
19.Les contraceptifs oraux estro-progestatifs, quels qu'ils soient, augmentent le risque de base de phénomène thrombo-embolique de 2 à 3 fois. Le contraceptif Yaz®, utilisé par la patiente, et contenant la drospirénone (progestatif de quatrième génération), ne modifie pas significativement ce risque comparativement aux autres contraceptifs oraux estro-progestatifs. Par ailleurs, tel que discuté, tous les facteurs de risque présents chez madame Guindon et son historique médicale personnelle, influencent et augmentent individuellement et collectivement, son risque thrombo-embolique.

## CAS DE MADAME GENEVIÈVE GLADU

20. Madame Geneviève Gladu, née en juin 1979, utilisait la contraception orale estroprogestative depuis quelques années, au moins depuis l'année 2005, où le dossier mentionne la reprise de contraceptifs oraux (Triphasil@, Alesse®). Ceux-ci sont modifiés pour Yasmin® (Éthinyl-estradiol 30 mcg et drospirénone 3mg) en 2008, entre le mois de mars et le mois de septembre. En juin 2009, âgée de 30 ans, madame Gladu se présente à l'urgence pour nausées et douleurs abdominales. Un diagnostic de colique biliaire avec pancréatite est l'hypothèse de travail de l'équipe médicale.
21.L'évaluation en gastro-entérologie précise un phénomène de pancréatite biliaire. Le scan abdominal démontre de nombreux calculs, une stéatose hépatique et un phénomène compatible avec une pancréatite. Elle est hospitalisée et mise sous antibiotiques. En cours d'hospitalisation, quelques jours plus tard, la patiente présente une dyspnée, qui une fois investiguée, s'avère secondaire à la présence d'une embolie pulmonaire. Une anticoagulation est débutée et un filtre est mis en place dans la veine cave en attendant la sphinctérotomie qui a lieu le 26 juin et une cholécystectomie éventuelle. Celle-ci est pratiquée dans un second temps le 4 juillet 2009.

## Question et opinion

Les problèmes de santé allégués à l'égard de madame Gladu, soit les calculs biliaires, la pancréatite biliaire, la cholécystectomie (résection de la vésicule biliaire), et les embolies pulmonaires auraient-ils été causés par la prise de Yasmin (3)?

## Lithiases (calculs) biliaires/pancréatite biliaire/cholécystectomie

22. Madame Gladu est une femme de petite taille ( 5 pieds 2 ) mais elle pèse 178 livres (IMC : $37,2 \mathrm{~kg} / \mathrm{m} 2$ ). Lors de son hospitalisation, on lui diagnostique aussi une hyper triglycéridémie. L'obstruction de l'ampoule pancréatique par un calcul ou le reflux de bile dans le canal pancréatique sont probablement les causes les plus fréquentes de pancréatite. Toutefois seulement 3 à $7 \%$ des patientes porteuses de lithiases développeront une pancréatite. La femme étant plus à risque de lithiase que l'homme, elles sont plus à risque de pancréatite. L'hypertriglycéridémie est également associée à la pancréatite, mais plus rarement.

## 23.[...]

## Phénomène thrombo-embolique

24.Quant au phénomène thrombo-embolique, de nombreux facteurs de risque prédisposants, tels que notés antérieurement, sont également ici présents chez madame Gladu. Elle utilisait la contraception orale depuis plusieurs années. Hospitalisation, immobilisation, obésité, processus infectieux sont tous présents. Les commentaires déjà émis dans l'analyse du dossier de madame Guidon quant au risque thrombo-embolique associés aux contraceptifs oraux, sont aussi justes dans le cas de madame Gladu. Les contraceptifs oraux estro-progestatifs augmentent le risque de base de phénomène thrombo-embolique de 2 à 3 fois. Le contraceptif Yasmin®, utilisé par la patiente, et contenant la drospirénone (progestatif de quatrième génération), ne modifie pas significativement ce risque comparativement aux autres contraceptifs oraux estro-progestatifs. Par ailleurs, tel que discuté, tous les facteurs de risque présents chez madame Gladu et son historique, (obésité, hospitalisation, immobilisation, processus infectieux), influencent et augmentent significativement, individuellement et collectivement, son risque thrombo-embolique.

## Conclusion

25.[...]
26. Les contraceptifs oraux estro-progestatifs quels qu'ils soient, augmentent le risque de base de phénomène thrombo-embolique de 2 à 3 fois. Tel que discuté, tous les facteurs de risque présents chez madame Gladu et son historique, influencent et augmentent individuellement et collectivement, son risque thrombo-embolique. Le contraceptif Yasmin®, utilisé par la patiente, et contenant la drospirénone (progestatif de quatrième génération), ne modifie pas significativement ce risque comparativement aux autres contraceptifs oraux estro-progestatifs.

## CAS DE MADAME JULIE BOUCHARD

27. Madame Julie Bouchard est née en avril 1981. Il s'agit d'une patiente de petite taille (4 pieds 11, 125 livres, 1 MC $25,2 \mathrm{~kg} / \mathrm{m} 2$ ), atteinte d'un syndrome de Turner (anomalie chromosomique) en 2008. Elle est aussi porteuse d'une anomalie rénale, pour laquelle elle fut opérée en très bas ãge. Elle présente un léger surplus de poids, une hypertension artérielle sous médication, un syndrome métabolique, un diabète de type 2, une dyslipidémie et une ostéopénie. L'auscultation cardiaque laisse aussi entendre un souffle. Elle est suivie en endocrinologie et néphrologie.
28. Le contraceptif Yasmin® (éthinyl-estradiol 30 mcg et drospirénone 3 mg ) est prescrit en mars 2009 par l'endocrinologue pour améliorer la masse osseuse. Le 5 août 2009, alors âgée de 28 ans, madame Bouchard se présente à l'urgence pour une paresthésie du visage, trouble de langage et paralysie de l'hémiface droit. La présentation clinique laisse présumer à un diagnostic d'accident vasculaire cérébral gauche. À son arrivée à l'hôpital, la liste des médicaments utilisés par la patiente est notée et on n'y retrouve pas de contraceptif oral.

## Question et opinion

Les problèmes de santé allégués à l'égard de madame Bouchard, soit les AVC auraient-ils été causés par la prise de Yazmin®?
29. Mme Bouchard présente également plusieurs facteurs de risque vasculaire dont l'hypertension et le diabète. Elle ne prenait plus le Yasmin® au moment des évènements en cause. Le docteur Stéphane Charest, neurologue, mentionne dans son résumé de dossier du 14 août 2009 que «des contraceptifs oraux avaient èté donnés dans le temps mais cessés en raison d'effets secondaires bien avant cet événement neurologique qui n'a aucun lien avec cette médication prise dans le passé".
30.[...]

## Conclusion

31.[...]

ET J'Al SIGNÉ À MONTRÉAL, le 17 juin 2016

## COPIE CONF:ORME <br> Locieter díanonato Toruya aencerel. Société d'avocats Torys S.EKN.C.R.L.



André Masse MD, CSPQ, FRCSC
Obstétricien-gynécologue
Professeur titulaire de clinique
Département d'obstétrique-gynécologie
Université de Montréal
Hôpital Saint-Luc du CHUM
Membre de la Société d'experts en évaluation médicolégale du Québec (SEEMLQ)

Déclaré solennellement devant moi à Montréal, le 17 juin 2016


Commissaire à l'assormentation


$2$

## CANADA <br> PROVINCE OF QUEBEC DISTRICT OF MONTREAL

(Class Action) SUPERIOR COURT

JANIE GUINDON
and
GENEVIÈVE GLADU
and

## SERGE BOUCHARD

Plaintiffs
v.

## BAYER INC.

Defendant

## AFFIDAVIT OF DR. STEVEN A. GROVER, M.D.

I, the undersigned, Steven A. Grover, M.D., Professor of Medicine at McGill University, having a place of practice at the McGill Comprehensive Health Improvement Program (CHIP), located at 430 Rue Saint Pierre, in the City of Montréal, Province of Québec H2Y 2M5, duly sworn do depose and say:

1. This Affidavit is produced as a review of the Affidavit provided by Dr. Andre Masse, M.D., CSPQ, FRCSC and the associated medical files for Janie Guindon, Genevieve Gladu, and Julie Bouchard as part of an Application for Authorization to Institute a Class Action against the Defendant Bayer Inc., in relation to oral contraceptives marketed under the names Yaz and Yasmin.

## QUALIFICATIONS

2. I am a board certified specialist (Canada and USA) in Internal Medicine and a Professor of Medicine at McGill University. I have also been on staff at the Montreal General Hospital (now part of the McGill University Health Center) since 1986. Beyond my clinical practice, I have also been a
member of the Division of Clinical Epidemiology at the Montreal General Hospital since 1986 and was the Director of this division from 1995-2007. A copy of my C.V. is attached.

## DOCUMENTS AND MEDICAL RECORDS CONSULTED

3. I have reviewed the declaration provided by Dr. Andre Masse, M.D., CSPQ, FRCSC and the medical files provided to me for Janie Guindon, Geneviève Gladu, and Julie Bouchard. I also reviewed the expert opinion provided by Dr. David Sackett, which was filed in the Ontario proceeding, and reviewed the published literature on the risk of gall bladder stones associated with the use of specific oral contraceptives.

## CASE OF JULIE BOUCHARD

4. I reviewed the file of Julie Bouchard and agree with Dr. Masse's opinion that Ms. Bouchard suffered repeated strokes as a result of a vasculitis affecting the arterial circulation of the brain. Vasculitis is a much rarer cause of stroke than the thrombo-embolic causes that have been associated with some oral contraceptives (OC). There is no convincing evidence that I am aware of that vasculitic strokes are associated with the taking of any OC, including Yasmin. As a rare condition it is unlikely that an association could be made convincingly given the few cases of vasculitic strokes among OC users that would be available for study.
5. Accordingly, I agree with Dr. Masse that it is unlikely that Yasmin was a cause of these vasculitic strokes.

## CASE OF JANIE GUINDON

6. Ms. Guindon suffered from two medical problems, acute cholecystitis requiring the removal of her gall bladder in November 2009, followed by the diagnosis of thrombophlebitis one month later. Both of these conditions have been associated with the taking of OC including Yasmin.
7. I agree with Dr. Masse that the primary cause of the thrombophlebitis was the immobility and surgery during the previous month for the removal of her gall bladder. I cannot rule out that Yasmin increased the risk of this complication but would consider this a minor factor compared to those associated with the surgery.
8. Regarding the cause of the gallstones, I agree with Dr. Masse that this patient had many important risk factors associated with gall stones. In the
largest study to date examining the risks of gall stones associated with different OC, (Etiminian et al) the most important risk factors associated with gall stones that were present in this patient were obesity and smoking. In this study of 2.7 million women including over 27,000 who developed gall stones, those with obesity had an increased in risk of $141 \%$ to $187 \%$ and smokers had an increased the risk of $99 \%$ to $114 \%$.
9. However, this study also compared the risk of specific OC after statistically adjusting for risk factors such as obesity and smoking. Seven different OC drugs were available for comparison based on the progestin compound that they contained. Levonorgestrel was selected as the reference progestin as it was one of the most commonly used. After statistically adjusting for 13 other factors associated with gall stones, only two OC were associated with a small but measurable increase risk in gallstones compared to levonorgestrol; norethinderone ( $6 \%$ to $14 \%$ increased risk) and drospirenone ( $16 \%$ to $26 \%$ increased risk). Drospirenone is the progestin compound used in Yasmin.
10. While this increased risk may be small compared to the other risk factors this patient had for gallstones, it cannot be considered zero based on the largest study to date.
11. Dr. Masse also argues that the patient had only been on Yasmin for two months making this an unlikely cause of the gallstones. This patient was at increased risk of gallstones due to her weight and smoking habit and the fact that she had used OC of various forms since 2003. I agree with Dr. Masse that only two months of Yasmin was unlikely to be the sole cause of the gallstones but one cannot rule out that it contributed to the development of symptomatic disease where the existing stones grew larger with the introduction of Yasmin and finally obstructed the gall bladder.
12. I therefore disagree with Dr. Masse that Yasmin could not have played a role in the gall bladder stones. One could in fact argue that in a patient at increased risk of gallstones like Ms. Guidon, Yasmin, with a small but measurable increased risk for gallstones, should be considered a secondary choice compared to other OC.
13. Accordingly, I cannot agree with Dr. Masse that Yasmin did not have any significant effect in the formation of the gallstones. The risk associated with Yasmin may have indeed been small compared to the other factors that were present in this patient but it was not insignificant given the data from this study.

## CASE OF GENEVIÈVE GLADU

14. This case is very similar to that of Janie Guindon. The formation of gallstones was the cause of her biliary obstruction and pancreatitis. The critical issue is could the use of Yasmin increase the risk of developing gallstones in a women with other risk factors including obesity and hypertriglyceridemia. The results of the previously mentioned study by Etimian et al suggest that while the increased risk (16\% to 26\%) associated with Yasmin is small compared to major risk factors like obesity ( $141 \%$ to $187 \%$ ), it is not zero.
15. As mentioned in the previous case, the thrombophlebitis that developed during her hospitalization for biliary obstruction and pancreatitis was probably due to the immobilization and inflammation associated with these conditions that required her admission in the first place.
16. Accordingly, I cannot agree with Dr. Masse that the choice of Yasmin did not play any role in her admission for gallstones and pancreatitis followed by thrombophlebitis several days later.


Steven A. Grover, M.D.
Professor of Medicine
McGill University
McGill Comprehensive Health Improvement Program (CHIP)

SIGNED AND SWORN TO BEFORE ME ON THE $19^{\text {TH }}$ DAY OF AUGUST 2016.

C A N A D A
PROVINCE DE QUÉBEC
DISTRICT DE MONTRÉAL

| COUR SUPÉRIEURE-ACTION COLLECTIVE |
| :--- |
| NO:500-06-000484-093 <br> JANIE GUINDON <br> ET ALS. <br> Demandeurs <br> C. <br> BAYER INC. <br> Défenderesse <br> DR. STEVEN A. GROVER, M.D. <br> AFFIDAVIT OF <br> Copie à la Défenderesse <br> a/s Mes Sylvie Rodrigue <br> Société d'avocats Torys <br> 1 Place Ville-Marie, bureau 1919 <br> Montréal (Québec) H3B 2C3 |

SISKINDS, DESMEULES, AVOCATS, S.E.N.C.R.L.
LOS əulns 'łuanne - -tules '08t

$3$

CANADA
PROVINCE OF QUEBEC
DISTRICT OF MONTREAL
No: 500-06-000484-093

S U P E R I O R<br>C O U R T (Class Action)

## JANINE GUINDON

-and-
GENEVIEVE GLADU
-and-

## SERGE BOUCHARD

Petitioners
-VS-

BAYER INC.
Respondent

EXAMINATION OF STEVEN GROVER

APPEARANCES:
Me SAMY ELNEMR
for Petitioners

Me GENEVIEVE BERTRAND
Me SYLVIE RODRIGUE
for Respondent
DECEMBER 13, 2016

AZ161213.
ASTRIDA AUZA,
o. c. r.

## INDEX

PAGE

STEVEN GROVER
Examination by Me Geneviève Bertrand . . . . . 5

## LIST OF UNDERTAKINGS

PAGE
\#U-1: $\quad$ Prepare a list of the studies that Dr.
Grover consulted. And if he cannot come
up with a complete list of the
literature reviewed, then confirm
whether or not he the Jick Study in the
course of his literature review (page
61).

## LIST OF EXHIBITS

PAGE

I-1: A copy of the Jick Study - three pages .59

I-2: A copy of the Etminan Study

|  |  |  |
| :---: | :---: | :---: |
| 1 In the year of Our Lord, two thousand and sixteen | 1 A- | And I guess that's a good description of what I |
| 2 (2016), on this thirteenth (13th) day of December; |  |  |
|  | 3 Q- | Okay, and what about the clinical epidemiology? |
| 4 PERSONALLY CAME AND APPEARED; | 4 A- | Clinical epidemiology is basically a research |
|  |  | training. Usually people spend two (2) or more |
| 6 STEVEN GROVER, born the twenty-ninth (29th) day of |  | years training to become a clinical |
| 7 November, nineteen hundred and fifty-three (1953), |  | epidemiologist, and really clinical epidemiology |
| 8 Physician, residing at six four four (644) Argyle |  | is a combination of... it's largely a |
| 9 Avenue, Westmount, Province of Quebec; | 9 | familiarity with biostatistics, but it's also |
| 10 | 10 | developing an expertise on study, design, the |
| 11 WHO, after having made a Solemn Affirmation, doth |  | strengths and the weaknesses of a study. |
| 12 depose and say as follows; | 12 | In layman's terms, I would sort of say |
| 13 | 13 | clinical epidemiology is... is developing the |
| 14 EXAMINATION BY Me GENEVIEVE BERTRAND | 14 | skills to understand research data that's |
| 15 On behalf of Respondent: | 15 | developed and published in clinical medicine. |
| 16Q- Hello, Dr. Grover, my name is Geneviève | 16Q- | Okay. And what proportion do you practise in |
| 17 Bertrand, I represent Bayer Inc. in the Class | 17 | the clinical epidemiology portion versus |
| 18 Action concerning Yaz and Yasmin that was filed | 18 | internal medicine? |
| 19 in Quebec. My colleague, Sylvie Rodrigue, is | 19A- | My time is about seventy-five percent (75\%) |
| 20 also present here today. | 20 | clinical epidemiology, twenty-five percent (25\%) |
| 21 I'm going to ask you a series of questions, | 21 | internal medicine. |
| 22 if you don't understand the questions, simply | 22Q- | Okay, and in terms of the internal medicine, |
| 23 let me know and I will reformulate the question. | 23 | ere do you practise? |
| 24 Also, it's important to answer verbally, because | 24 A - | Montreal General Hospital, and McGill |
| 25 the Stenographer won't be able to transcribe, | 25 | Comprehensive Health Improvement Program, which |
|  |  |  |
| obviously, gestures, nods, that kind of thing. |  | I'm the founding director of, it's a health |
| And lastly, it's important to let me finish |  | promotion program that we set up about twenty |
| asking the question before you start answering, |  | (20) years ago. |
| because the Stenographer can't take down what we | 4 Q- | And in terms of your clinical epidemiology |
| both say at the same time. |  | practice, where does that take place? |
| Okay, what is your area of specialty? | 6 A- | Most of the work is actually taking place here |
| 7 A- I'm a general internist by training, and I'm a |  | in these offices now, but it's under the... |
| 8 clinical epidemiologist. | 8 Q- | "In these offices" would be the McGill |
| 9 Q- And what does that entail in terms of the first |  | Comprehensive Health... |
| 10 general... | 10 A - | No, the offices we're in right now. |
| $11 \mathrm{~A}-\mathrm{Well}$, internal. | 11 Q- | Right. And so, which offices, just for the |
| 12Q- ... clinical... | 12 | transcript? |
| 13A- Internal medicine... | 13A- | This... |
| 14Q- Yes. | 14Q- | What are we referring to? |
| 15A- ... is basically the sort of diametric opposite | 15A- | Two (2) things, this... these offices represent |
| 16 of general surgery. We take care of complex | 16 | the... the offices for Clinemetrica Inc., which |
| 17 diagnostic and therapeutic problems for adults, | 17 | is a consulting firm we run. It's also a firm |
| 18 and adults only. Typically, we're the guys who | 18 | that does corporate health and wellness, and on- |
| 19 are in charge of the wards in the hospitals for | 19 | line health and wellness both for commercial, |
| 20 the medical side of the hospital. | 20 | government and personal use, but also for |
| 21 At McGill University, where I'm a professor | 21 | research purposes. |
| 22 of medicine, we're the guys who typically teach | 22 | My clinical epidemiology associates who |
| 23 the medical students, interns and residents, you | 23 | work under my sources of funding all have their |
| 24 know, how to practice internal medicine. | 24 | offices here because there's inadequate space in |
| 25Q- Yes. | 25 | the hospitals. And we also run the McGill |


|  | 9 |  |  | 11 |
| :---: | :---: | :---: | :---: | :---: |
|  | Comprehensive Health Improvement Program |  | tests... |  |
|  | administrative side of things out of here as | 2 Q- | Yes. |  |
| 3 | well, in this space. | 3 A- | ... approaches to diagnosis and therapy... those |  |
| 4 Q- | And what does your epidemiology practice entail? |  | sorts of things. |  |
| 5 A- | Largely research, it's typically getting | 5 Q- | Okay. And what about the internal medicine |  |
| 6 | research grants from the Federal Government, or |  | portion of your practice in that case, in... |  |
| 7 | from industry, or from some other, you know, | 7 A- | Largely a general... |  |
|  | funding source. Conducting research... | 8 Q- | General... |  |
| 9 Q- | What kind of... | 9 A- | ... medicine practice. |  |
| 10A- | ... publishing the results... | 10Q- | Okay. |  |
| 11 Q - | On which topics... | 11 A - | You know, the full range of... gamut of problems |  |
| 12A- | Most of... | 12 | that adults show up with. |  |
| 13Q- | ... typically? | 13Q- | So, you don't prescribe oral contraceptives? |  |
| 14 A - | ... my research has typically been around | 14 A - | I haven't prescribed an oral contraceptive, I'm |  |
| 15 | cardiovascular disease, cardiovascular disease | 15 | sure, in thirty (30) years. |  |
| 16 | prevention. More recently diabetes, obesity, | 16 Q- | Okay. And you've never contributed to studies |  |
| 17 | we're reaching out into mental health issues | 17 | regarding gall bladder disease? |  |
| 18 | now. But most of it's around cardiovascular | 18 A - | Let me think about it for one second. |  |
| 19 | disease. | 19 | No, l've never published a study on gall |  |
| 20Q- | Okay. And does that pretty much cover what | 20 | bladder disease. |  |
| 21 | you've described, the clinical epidemiology | 21 Q- | And you... or contributed to a study on gall |  |
| 22 | portion of your practice... and research, I | 22 | bladder disease? |  |
| 23 | should say... | 23 A - | No, not that I can recall. |  |
| $\begin{aligned} & 24 \mathrm{~A}- \\ & 250- \end{aligned}$ | Yes, it's not... in terms of | $\begin{aligned} & 24 \text { Q- } \\ & 25 \end{aligned}$ | And you've never contributed to studies related |  |
|  | ... in terms of... |  | to oral contraceptives? |  |
|  | 10 |  |  | 12 |
| 1 A- | The clinical epidemiology is really a | 1 A- | Jesus... Well, yes... Not... I... I don't |  |
|  | research... |  | consider myself an oral contraceptive researcher |  |
| 3 Q- | Right. |  | or expert, but indirectly some of our research |  |
| 4 A- | ... profession, as opposed to a practice. |  | studies have been around things like |  |
| 5 Q- | Right, I meant... |  | thrombophlebitis, which was indirectly |  |
| 6 A- | Yes. |  | associated in many cases with the prescription |  |
| 7 Q- | ... research instead of... |  | of oral contraceptives. But I'm not suggesting |  |
| 8 A- | Yes. |  | to you that I consider myself an oral |  |
| 9 Q- | ... practice, but does that cover what you've | 9 | contraceptive researcher. |  |
| 10 | said... Does that cover that portion of the | 10Q- | And when you mentioned that thrombophlebitis |  |
| 11 | epidemiological research that you do? | 11 | effect related to an oral contraceptive, is that |  |
| 12A- | Well, over the years... I've been doing this now | 12 | a study topic that you addressed specifically, |  |
| 13 | since nineteen... You know, my first clinical | 13 | or was that... |  |
| 14 | epidemiology paper was probably published around | 14 A - | No, it was just something I was peripherally |  |
| 15 | eighty-four ('84), and I came back to McGill in | 15 | involved in. But that was the focus of the |  |
| 16 | eighty-six ('86), and the range of topics I've | 16 | study... |  |
| 17 | published on over the years is quite extensive, | 17 Q - | Okay. |  |
| 18 | but l'm giving you the highlights.. | 18 A - | ... they were looking at an... the benefits of |  |
| 19Q- | Right. | 19 | an exercise program for people who have |  |
| 20 A - | ... the things that I... | 20 | developed thrombophlebitis in the past. |  |
| 21 Q- | So, those... | 21 Q- | So, directly speaking, you've never contributed |  |
| 22A- | ... that I'm known particularly for. | 22 | to a study on oral contraceptives? |  |
| 23Q- | Those are the main ones, the topics you | 23A- | No. No. |  |
| 24 | mentioned? | 24 Q- | Or published a paper on... |  |
| 25A- | I would say cardiovascular disease, diagnostic | 25A- |  |  |



|  |  |  | 19 |
| :---: | :---: | :---: | :---: |
| 1 Q- And did you review any other studies, other | 1 A- | I have spoken to another lawyer who originally |  |
| 2 than... |  | approached me... |  |
| 3 A- Oh, lots. | 3 Q- | And.. |  |
| 4 Q- ... the Etminan.. | 4 A- | ... but I can't tell you what his name was. |  |
| 5 A- Yes. | 5 Q- | Was he an English speaking lawyer? I mean an |  |
| 6 Q- Do you recall some... |  | anglophone... you know what I'm saying, was |  |
| 7 A- No, I don't have the names for you, I... you | 7 | he... |  |
| 8 know, I initially... I had initially seen Dr. | 8 A- | I would... |  |
| Sackett's report, you know, but, to be quite | 9 Q- | ... a native anglophone speaker? |  |
| 10 frank with you, when I was first approached to | 10A- | I'm guessing... I'm guessing so, yes. |  |
| 11 do this, I said I'm really only interested in | 11 Q- | Okay. |  |
| 12 being on the right side of this argument, and | 12 A - | I'm guessing he was an English speaking lawyer. |  |
| 13 they showed me Dr. Sackett's report, who I... | 13Q- | Now, you mentioned that you knew Dr. Sackett. |  |
| 14 who I have personal experience with for many | 14 | Did you speak with Dr. Sackett in the context |  |
| 15 years, he's one of my mentors. His report | 15 | of.. |  |
| 16 focused primarily on the thrombophlebitis story, | 16A- | No. |  |
| 17 rather... | 17 Q - | ... drafting your report? |  |
| 18Q- Yes. | 18A- | No, I didn't, he had passed away by the time I |  |
| 19A- ... than the... the gall bladder disease story. | 19 | saw his report. |  |
| 20 | 20 Q- | Right. |  |
| 21 So, I reviewed his report, I reviewed a | 21 | You mentioned that you wanted... you were |  |
| 22 number of the papers that he quoted, so that I | 22 | interested... only interested in being on the |  |
| 23 could get a handle on that information myself.. | 23 | right side of the question, what did you mean by |  |
| 24 Q- So, who provided you with Dr. Sackett's report? | 24 | that? |  |
| 25 A - What's your firm's name? | 25A- | Well, I said I wouldn't serve as a... as an |  |
|  |  |  | 20 |
| 1 Me SAMY ELNEMR, |  | expert witness in this if I felt that... that |  |
| 2 On behalf of Petitioners: |  | the position this firm was taking as part of |  |
| 3 Siskinds. |  | their Class Action was the wrong position. So, |  |
| 4 Me GENEVIEVE BERTRAND: |  | I had to first convince myself that it really |  |
| 5 Q- So, what... And when you say "Siskinds," was it |  | did look like there was an increased risk |  |
| 6 Siskinds... was it Maître Elnemr, or was it |  | associated with Yasmin. |  |
| Siskinds in Toronto? | 7 Q- | And what convinced you of that? Or were you |  |
| 8 A- I can't recall. I don't remember who sent me |  | convinced that there was? |  |
| the report. | 9 A- | Yes, I was convinced, and... |  |
| 10 Q- Did you have contact with any other lawyer than | $10 \mathrm{Q}-$ | And what convinced you? |  |
| 11 Maître Elnemr? | 11 A - | ... it was largely that paper that I quoted. |  |
| 12A- Yes, there were some others. Was there anybody | 12 Q - | Okay. Were you familiar with the Etminan Study |  |
| 13 from Toronto, or were they all... |  | before reading it? |  |
| 14 Me SAMY ELNEMR: | 14 A - | I knew nothing of this particular birth control |  |
| 15 You're going to have to answer... |  |  |  |
| 16A- I just... | 16 Q - | And you're referring to Yaz and Yasmin? |  |
| 17 Me GENEVIEVE BERTRAND: | 17 A - | Right. I mean, given that I haven't prescribed |  |
| 18Q- To the best of your knowledge... |  | them in thirty (30) years, I... I wasn't up-to- |  |
| 19 Me SAMY ELNEMR: |  | date on what's happening in birth control pills. |  |
| 20 ... to the best of your knowledge. | 20Q- | Right. |  |
| 21 A - I just can't recall. But... | 21 | How would you qualify your level of |  |
| 22 Me GENEVIEVE BERTRAND: | 22 | understanding when reading French? |  |
| 23Q- Do you remember... | 23 A - | I think it was pretty good. Whenever... but if |  |
| 24A- ... I have... |  | I had any doubts, I either turned to a colleague |  |
| 25 Q- ... any names? | 25 | and made sure I understood it correctly, or I... |  |


|  | 21 |  |  | 23 |
| :---: | :---: | :---: | :---: | :---: |
|  | you know, I used Google Translate if there | 1 Q- | Okay, that you can... |  |
|  | was... | 2 A - | ... l... You know, to me it really... this |  |
| 3 Q- | Okay. |  | case... out of... the three (3) cases really |  |
| 4 A- | ... a word I couldn't... you know, but it was |  | hung on that specific paper, I found nothing |  |
|  | not a very difficult testimony to read, the |  | else that was either... on gall bladder disease |  |
| 6 | obstetrician/gynaecologist who wrote the other |  | that was either confirmatory or contradictory to |  |
| 7 | report... it was fairly straightforward. |  | that specific paper, and you know, the rest of |  |
| 8 Q- | So, you're talking about Dr. Masse... Dr... |  | my reading was on gall bladder and |  |
| 9 A | Right. |  | thrombophlebitis. |  |
| 10Q- | ... André Masse's... | 10 | And I mean, I could... I probably do have |  |
| 11 A - | Right. | 11 | a digital trail, so to speak, because as a |  |
| 12Q- | ... report? | 12 | general rule, I would... |  |
| 13 | And in terms of the medical records... | 13Q- | Yes. |  |
| 14 A - | Right, the medical records were not particularly | 14 A - | ... copy a paper and put it away. But there |  |
| 15 | complicated either. | 15 | could be all kinds of stuff... |  |
| $16 \mathrm{Q}-$ | Okay. Did you review any other documents in the | 16Q- | Okay. |  |
| 17 | context of... We've talked about some of the | 17A- | ... that I've just... I don't really... I'd have |  |
| 18 | literature... | 18 | to spend some time on it... |  |
| 19A- | No. | 19 Q- | Okay. |  |
| 20Q- | ... Dr. Masse's report.. | 20 A - | ... if that's what you wanted. |  |
| 21 A - | I... | 21 Q- | Well, if it's easily... if you do have a folder |  |
| 22 Q - | ... the medical records. | 22 | where you've... |  |
| 23A- | My review was confined to Dr. Sackett's report, | 23 A - | I don't. |  |
| 24 | my own research around the literature on birth | 24Q- | ... split everything... okay. |  |
| 25 | control pill and these complications, and Dr. | 25 | How did you come to be involved in the |  |
|  | 22 |  |  | 24 |
|  | Masse's report. |  | proceedings... in the Class Action as an expert? |  |
| 2 Q- | Okay. | 2 A- | A member of... a lawyer in Siskinds' firm... a |  |
|  | Did you... In the context of preparing your |  | different lawyer called me up... or sent me an |  |
|  | report, did you review the medical records, as |  | e-mail, rather... |  |
| 5 | well? | 5 Q- | Okay. |  |
| 6 A- | Yes. | 6 A - | ... and asked me would I be interested in doing |  |
| 7 Q- | So, Ms. Guindon, Ms. Gladu, and Ms. Bouchard's |  | this, and I sort of responded, "Well, where did |  |
|  | medical records... |  | you get my name from, and why are you calling |  |
| 9 A - | That's right. | 9 | me?"... |  |
| 10Q- | ... the three (3) representative Plaintiffs? | 10Q- | Right. |  |
| 11 A - | That's right. | $11 \mathrm{~A}-$ | ... and that sort of thing. |  |
| 12Q- | Would you be in a position to provide us with a | 12Q- | And was that in the context of the Quebec |  |
| 13 | list of the literature that you've reviewed... | 13 | action? |  |
| 14 | a list of the research you did? Did you keep a | $14 \mathrm{~A}-$ | I guess so, yes. |  |
| 15 | track of any of it, or would you have to redo | 15Q- | And do you remember who... You said you don't |  |
| 16 | the research? | 16 | remember who... |  |
| 17 A - | I have some reprints of papers that I thought | 17A- | But I... |  |
| 18 | started to look interesting, but certainly... I | 18Q- | ... you specifically spoke to? |  |
| 19 | have some... this would take some work. | 19A- | That's a name I can come up with... |  |
| 20Q- | Okay. | 20Q- | Okay. |  |
| 21 A - | This would take some work. | 21 A - | ... if I had to. |  |
| 22Q- | So, you don't have something... | 22Q- | Well, no, that's fine, actually. |  |
| 23 A - | In some... | 23 | Well, how many times... 'lll ask you this, |  |
| 24 Q - | ... ready... | 24 | how many times have you spoken to counsel in the |  |
| 25A- | Well, in some... No, I don't have anything... | 25 | course of the mandate? If you recall. |  |





|  | 37 |  |  | 39 |
| :---: | :---: | :---: | :---: | :---: |
|  | cause anybody any trouble... |  | the Yaz. |  |
| 2 Q- | Right. | 2 Q- | Okay. Switching gears now, still on Ms. |  |
| 3 A- | ... nobody fusses about them. |  | Guindon, but with regard to the |  |
| 4 Q- | Would you agree that it's likely... more likely |  | thromboembolism... |  |
| 5 | than not... that it's likely that a gallstone | 5 A- | Yes. |  |
| 6 | that size would have started forming before she | 6 Q- | ... you're aware that without any risk factors, |  |
| 7 | had started taking the Yaz... before two (2) |  | just generally speaking, the risk of developing |  |
| 8 | months, basically, it would... |  | thrombophlebitis is four (4) out of ten thousand |  |
| 9 A- | Yes, I really couldn't say, I have no... I have | 9 | $(10,000)$ persons a year? Are you aware of that? |  |
| 10 | no knowledge of exactly what... the speed that | 10 A - | I wouldn't know that... |  |
| 11 | gallstones can grow. | 11 Q - | Okay. |  |
| 12 Q - | Okay. But you agree with Dr. Masse that Ms. | 12A- | ... number off the top of my head. |  |
| 13 | Guindon had many important risk factors... | 13Q- | And that using any oral contraceptive, no matter |  |
| 14 A - | Yes. | 14 | the brand, would increase that risk by two to |  |
| 15Q- | ... associated with gallstones? | 15 | three (2-3) times? |  |
| 16A- | Yes, I do. | 16 A- | I know that most oral contraceptives will |  |
| 17 Q - | And you also agree that Ms. Guindon's most | 17 | increase the risk of developing |  |
| 18 | important risk factors were associated... Well, | 18 | thrombophlebitis. |  |
| 19 | were... regarding the gallstone, were the | 19Q- | Okay. Regardless of the oral contraceptive, |  |
| 20 | obesity and the fact that she smoked? | 20 | regardless of... |  |
| 21 A- | I would argue her most important risk factor was | 21 A- | Right. |  |
| 22 | the fact that she was hospitalized for a | 22 Q- | ... the brand? And the risk of developing |  |
| 23 | cholecystectomy... up until she was hospitalized | 23 | thrombophlebitis when taking an oral |  |
| 24 | for a cholecystectomy... I'm sorry, you're | 24 | contraceptive decreases with the dose of |  |
| 25 | talking about the gallstones. Yes... | 25 | estrogen... are you aware of that? |  |
|  | 38 |  |  | 40 |
| 1 Q- | Yes. | 1 A- | Yes. |  |
| 2 A- | ... I would argue... Yes, you're right, the | 2 Q- | And you're aware that the Institut national de |  |
| 3 | smoking and the obesity would be the most |  | santé publique du Québec... so the INSPQ... |  |
| 4 | important reason that she developed the | 4 A- | Yes. |  |
| 5 | gallstones. | 5 Q- | ... reviewed the available studies regarding the |  |
| 6 Q- | Right. So, for Ms. Guindon... |  | risk of progesterone in oral contraceptives? |  |
| 7 A- | Yes. | 7 A- | Yes. |  |
| 8 Q- | ... you agree with that? | 8 Q- | Were you aware of that? |  |
| 9 | And you agree that the risks associated | 9 A- | Yes, I don't know that they did that study, but |  |
| 10 | with any oral contraceptive for developing | 10 | I wouldn't be put off by any provincial or |  |
| 11 | gallstones is small compared to other risk | 11 | national body that comes up with these sorts of |  |
| 12 | factors? So, we're talking about the risk | 12 | reviews. |  |
| 13 | factors of obesity, smoking, immobility... | 13Q- | Okay. And Dr. Masse referred to this review in |  |
| 14 A - | Yes, I... I would... | 14 | his expert report, do you have a recollection of |  |
| 15Q- | ... surgery... | 15 | that... that he mentioned that? |  |
| 16A- | I would agree that obesity and smoking are more | 16 A- | I didn't recall that he mentioned it, but |  |
| 17 | important. | 17 | I've... you know, l've served as... l've served |  |
| 18Q- | Okay. And you agree that Ms. Guindon's use of | 18 | on these committees over the years, and I've |  |
| 19 | Yaz is not the cause of the gallstone? | 19 | also been an expert advisor to these committees, |  |
| 20 A - | No, I wouldn't agree to that. | 20 | and I wouldn't let any committee report... |  |
| 21 Q- | Okay, but it's not... It's not the main cause of | 21 Q- | Yes. |  |
| 22 | the gallstone, there are, as we mentioned, the | 22 A - | ... in Quebec, or Canada for that matter, change |  |
| 23 | other factors that are more important than... | 23 | my opinion, because... |  |
| 24 A - | There are other causes that I would agree with | 24 Q- | Okay. |  |
| 25 | you are more likely to be more important than | 25A- | ... frankly, they're of only marginally... I |  |



|  | 45 |  |  | 47 |
| :---: | :---: | :---: | :---: | :---: |
| 1 Q- | You're not aware of that, okay. | 1 Q- | Okay. So, you agree that smoking, obesity, the |  |
| 2 | Do you know that a Factor V Leiden on its |  | surgery, immobilization, the Factor V Leiden |  |
| 3 | own increases seven (7) times the risk of |  | likely all contributed to the thrombophlebitis? |  |
| 4 | developing a thromboembolic event? | 4 A- | Yes. |  |
| 5 A- | If she had a... If she had a thrombotic | 5 Q- | And you agree that patients presenting |  |
| 6 | tendency, yes, that would increase her risk. |  | thromboembolic events generally present with |  |
| 7 Q- | Including a Factor V Leiden, you mean? | 7 | many different risk factors? |  |
| 8 A- | I have to check Factor V Leiden, but I'm sure | 8 A- | Yes. |  |
| 9 | you're right. | 9 Q- | And that the risk factors presented by Ms. |  |
| 10Q- | Okay. Now, you testified earlier that you | 10 | Guindon collectively and individually influenced |  |
| 11 | reviewed Ms. Guindon's medical records. You're | 11 | an increase for a thromboembolic risk? |  |
| 12 | aware that Ms. Guindon presented all those | 12A- | I'd agree with that. |  |
| 13 | risks? | 13Q- | And that this could have been the case, no |  |
| 14 A - | Yes. | 14 | matter what oral contraceptive she would have |  |
| 15Q- | That she presented with... | 15 | taken? |  |
| 16A- | Had multiple risks, yes. | 16 A - | I would agree with that. |  |
| 17 Q - | Right. She had obesity? | 17 Q - | And you'd agree that the use of an oral |  |
| 18 A - | Correct. | 18 | contraceptive containing drospirenone does not |  |
| 19 Q - | She was a smoker? | 19 | significantly increase the risk of a |  |
| 20 A - | Right. | 20 | thromboembolic event, compared to other oral |  |
| 21 Q- | She had surgery in November two thousand and | 21 | contraceptives? |  |
| 22 | nine (2009), two (2) months before presenting a | 22 A - | It's not clear to me, I don't agree with that. |  |
| 23 | thromboembolic event? | 23Q- | Okay. |  |
| 24 A - | Yes. | 24 A- | But it's a complicated issue, I will agree to |  |
| 25Q- | That she travelled long distances? She | 25 | that. |  |
|  | 46 |  |  | 48 |
| 1 | travelled between Gatineau and Quebec in that | 1 Q- | Okay. But it's not clear to you is what you |  |
| 2 | time before her thromboembolic event in December |  | would say... |  |
| 3 | of two thousand and nine (2009)? | 3 A- | I wouldn't... |  |
| 4 A- | I'm not sure I would have thought that was a | 4 Q- | ... to that? |  |
| 5 | major issue, but... but it could... it could | 5 A- | ... agree that it doesn't increase risk. |  |
| 6 | have played a role. | 6 Q- | And... but would you say that it does, or is |  |
| 7 Q- | And that she had a Factor V Leiden? |  | that unclear to you? |  |
| 8 A- | Okay. | 8 A- | I didn't... You know, once it was clear to... |  |
| 9 Q- | And... Okay, or were you aware of that in your | 9 | Once it was clear to me what the clinical cases |  |
| 10 | review of the record? | 10 | were, that were being presented, I didn't focus |  |
| 11 A - | I remember one (1) of them, I just didn't | 11 | most of my research on the thrombophlebitis |  |
| 12 | remember whether she was the one. |  | risk. There were conflicting papers, that was |  |
| 13Q- | Okay. But you remember seeing that... | 13 | clear, and it became increasingly clear to me |  |
| 14 A - | Yes, I do. | 14 | that the... If the surgical admission was the |  |
| 15Q- | ... and you agreed that that would be a factor? | 15 | primary cause of the thrombophlebitis -- which |  |
| 16A- | Yes, yes. Yes. | 16 | I felt it was -- then the question I asked, |  |
| $17 \mathrm{Q}-$ | And she also had high cholesterol even... | 17 | well, was the surgical admission due to the use |  |
| 18 A - | Yes, I'm not aware of high cholesterol being a | 18 | of one or other oral contraceptives? |  |
| 19 | major risk factor for thrombophlebitis. | 19 | So, I... I didn't think I could get to the |  |
| 20Q- | Okay. | 20 | bottom of this very easily. |  |
| 21 A- | It is a major risk factor for vascular | 21 Q- | Okay, so... |  |
| 22 | disease... | 22 A - | And I went the easier route, if you would. |  |
| 23Q- | Okay. | 23Q- | Which is the gall bladder... |  |
| 24 A - | ... but that's arterial vascular disease, not | 24 A - | The gall bladder story. |  |
| 25 | venous vascular disease. | 25Q- | ... to your mind? |  |



|  | 53 |  |  | 55 |
| :---: | :---: | :---: | :---: | :---: |
| 1 Q- | Okay, we'll get to the paper, let's cover Ms. |  | discussion. |  |
|  | Bouchard. | 2 Q- | Okay. |  |
|  | You testified that you reviewed her medical | 3 A- | And that, to me, was the critical issue. You |  |
|  | records? |  | know, in the absence of a randomized trial where |  |
| 5 A- | Yes. |  | they randomly give women one oral contraceptive |  |
| 6 Q- | And you agree with Dr. Masse that Ms. Bouchard's |  | versus the other, and then follow them for many |  |
|  | strokes were the result of a vasculitis |  | years to see who develops... |  |
|  | affecting the arterial circulation of the brain? | 8 Q- | Right. |  |
| $9 \mathrm{~A}-$ | Correct. | 9 A - | ... either thrombophlebitis or gall stones, |  |
| 10 Q | And that this has nothing to do with oral |  | you're really stuck with trying to come up with |  |
|  | contraceptives? | 11 | comparables. |  |
| 12 A - | I'm not aware of... I couldn't find any data to | $12 \mathrm{Q}-$ | Yes. |  |
| 13 | support that. | 13 A | And you really need a big study to pull that one |  |
| 14Q- | So, it has nothing to do with oral... | 14 | off, and this was the only one that I could find |  |
| 15A- | I don't... | 15 | that I thought was sufficiently powered. |  |
| 16Q- | ... contraceptives? | 16Q- | Okay. Were you aware that there were only two |  |
| 17 A - | ... think so. | 17 | (2) studies... or that there are two (2) studies |  |
| 18Q- | And you agree that it's unlikely that Yasmin was | 18 | concerning the use of drospirenone containing |  |
| 19 | the cause of Ms. Bouchard's vasculitic strokes? | 19 | oral contraceptives? So, you found one (1), |  |
| 20 A - | Correct. | 20 | which was the Etminan one... |  |
| 21 Q- | Okay. So, when you looked at the literature in | 21 A - | No, I found more... |  |
| 22 | preparation for your report... We talked about | 22 Q - | ... were you aware... |  |
| 23 | this a bit, but I want to ask you specifically, | 23 A - | I found more than... |  |
| 24 | did you look at all of the available studies, or | 24Q- | Okay. |  |
| 25 | only the studies that supported your position? | 25 A - | ... one (1), but I focused on what I... |  |
|  | 54 |  |  | 56 |
| 1 A- | No, no, I looked at all the available studies I | 1 Q- | Okay. |  |
|  | could. I was interested in trying to get to the | 2 A- | ... thought was the best study. |  |
|  | bottom of the question. | 3 Q- | Were you aware that there is only one (1) study |  |
| 4 Q- | Right. And as part of your analysis, did you |  | concerning the use of drospirenone compared to |  |
|  | identify any studies that concluded that |  | women who are not taking any oral |  |
|  | drospirenone use was not related to an increased |  | contraceptives? |  |
|  | risk of gall bladder disease compared to women | 7 A- | Yes, that wasn't the critical issue to me... |  |
| 8 | that were not taking an oral contraceptive? | 8 Q- | Okay. |  |
| $9 \mathrm{~A}-$ | I don't recall finding a study like that. | 9 A - | ... though. The critical issue was what... if |  |
| 10 Q | Did you identify any studies that concluded that |  | you're taking oral... You see, in an |  |
|  | drospirenone wasn't associated with a higher |  | epidemiologic... in an epidemiologic type study |  |
| 12 | risk of gall bladder disease, compared to the | 12 | like this, women who are taking oral |  |
| 13 | use of Levonorgestrel? | 13 | contraceptives, for whatever reason, are more |  |
| 14 A - | Wasn't? | 14 | likely to be similar, than comparing a women |  |
| 15Q- | Was not. |  | who's not taking an oral contraceptive, to |  |
| 16 A - | You know, I don't recall that either, that I | 16 | someone who is taking an oral contraceptive. |  |
| 17 | found one. The thing that was most important to | 17 | So, the great strength of this study was, |  |
| 18 | me was... the study I cited was, in my opinion, | 18 | they were comparing all oral contraceptive users |  |
| 19 | the best study. | 19 | and looking for a signal that one (1) or more |  |
| 20Q- | Okay. | 20 | oral contraceptives were worse than the others. |  |
| 21 A - | The one that had the greatest number of | 21 | And that's a very difficult thing to do, you |  |
| 22 | observations, the one that had sufficient | 22 | need a very big study for that. |  |
| 23 | statistical power to adjust for all of the other | 23Q- | Okay. |  |
| 24 | risk factors... or most of the other risk | 24 A - | But it's a much better comparison than comparing |  |
| 25 | factors that you've just mentioned in our | 25 | oral contraceptive users to non-users. |  |




|  | 65 |  |  | 67 |
| :---: | :---: | :---: | :---: | :---: |
|  | study... you wouldn't rely on the results of |  | significant does not mean that an observed |  |
|  | this study? |  | association is valid? |  |
| 3 A- | I would say that, given the two (2) studies | 3 A- | It cannot prove causality, correct. |  |
|  | together... If I had to choose between the | 4 Q- | Right. And so, statistically significant |  |
| 5 | results of these two (2) studies, I'd go with |  | associations can be observed as a result of |  |
| 6 | the Etminan Study because it's a vastly superior |  | chance alone? |  |
|  | study to the Jick Study. | 7 A- | Correct. |  |
| 8 Q- | But not having to choose between the two (2) in | 8 Q- | And statistically significant associations may |  |
|  | terms of the conclusions of the Jick Study, do |  | be affected by various types of bias? |  |
| 10 | you... Do you dispute the results of the Jick | 10 A - | By various types of bias, correct. |  |
| 11 | Study? | 11 Q- | And types of bias... or biases can... sorry, |  |
| 12 A - | The Jick Study didn't show any association, but |  | biases... and various types of biases can |  |
| 13 | the simplest explanation for the absence of the | 13 | include bias in the study design? |  |
| 14 | association would be the weak study design and | 14 A - | Right. |  |
| 15 | their inability to adjust for more than just | 15Q | Bias in conduct? |  |
| 16 | weight in their analysis. | 16 A - | Correct. |  |
| 17 Q | Is that something that you know, or something | 17 Q - | Bias in the analysis? |  |
| 18 | that you're... you suspect? Or... and what | 18 A - | Correct. |  |
| 19 | would you be... | $19 \mathrm{Q}-$ | And in your report, you refer to the results of |  |
| 20 A - | It makes it... |  | the Etminan Study, but you don't discuss its |  |
| 21 Q- | ... basing that on? | 21 | methodological limitations? |  |
| 22 A - | It makes it a weak study, that I know for | 22 A - | I didn't see any of those biases in the study |  |
| 23 | certain. Is that the reason they didn't find | 23 | design. |  |
| 24 | the association? I can never be sure of that. | 24 Q - | Okay, you don't mention that to be eligible for |  |
| 25Q- | Okay, in your report now, you refer to the | 25 | the study, for example, the women had to have |  |
|  | 66 |  |  | 68 |
|  | Etminan Study, you mention that the Etminan |  | been taking the oral contraceptive for at least |  |
|  | Study is a retrospective cohort study? | 2 | six (6) months? |  |
| 3 A - | Right. | 3 A- | No, I didn't mention that. |  |
| 4 Q- | And a... retrospective cohort studies also have | 4 Q- | And Ms. Guindon, herself, had been taking Yaz |  |
|  | their limitations? |  | for less than six (6) months? |  |
| 6 A- | Yes. | 6 A- | Right, but just because this study only included |  |
| 7 Q- | In retrospective studies, important data may not |  | women who'd been taking oral contraceptives for |  |
|  | be available? | 8 | six (6) months or more... If you believe, on the |  |
| 9 A - | Correct. | 9 | basis of this study's results, that there was an |  |
| 10 Q | And not having important data available can |  | increased risk associated with taking Yaz for |  |
| 11 | limit the ability to control for factors that | 11 | six (6) months or more, that doesn't mean that |  |
| 12 | can influence the outcome? | 12 | taking Yaz for less than six (6) months is |  |
| 13A- | Correct. | 13 | associated with no risk. |  |
| 14Q- | And you would agree that in epidemiology a valid | 14 Q - | But in this case, Ms. Guindon's group, the group |  |
| 15 | statistically significant association is not |  | of women taking an oral contraceptive for less |  |
| 16 | sufficient to establish a causal relationship? | 16 | than six (6) months, would not have been part of |  |
| 17 | I'll... I can repeat the question. | 17 | the study? |  |
| 18 Me | SAMY ELNEMR: | 18 A - | That's correct. |  |
|  | Could you repeat the question, please? | $19 \mathrm{Q}-$ | And you omitted in your study to discuss... in |  |
| 20 Me | GENEVIEVE BERTRAND: | 20 | your report, sorry, to discuss the impact of the |  |
| 21 Q- | You would agree that in epidemiology a valid | 21 | study's design features on the results of the |  |
| 22 | statistically significant association is not | 22 | study? |  |
| 23 | sufficient to establish a causal relationship? | 23 A - | I'm sorry, say that... |  |
| 24 A - | Correct. | 24 Q - | I can repeat the question. |  |
| 25Q- | So, just because results are statistically | 25 A - | Yes. |  |


|  |  | 69 |  |  | 71 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 Q- | So, in your report, you don't discuss the impact |  |  | compared to the other. So, all of these errors |  |
|  | of the study's design features on the results of |  |  | in the study design just reduce the likelihood |  |
| 3 | the study? |  |  | of finding an association. The fact that you |  |
| 4 A- | I didn't go in... I did not discuss the |  |  | find an association despite all those |  |
|  | strengths and weaknesses of the study. |  | 5 | shortcomings strengthens your conclusion that |  |
| 6 Q- | You omitted to mention that censoring for |  |  | there is an association. |  |
| 7 | cessation, or switching oral contraceptives was |  | 7 Q- | At Table 3... |  |
| 8 | extremely common, and that only twenty percent |  | 8 A- | Yes. |  |
| 9 | (20\%) of the original cohort was continuously |  | 9 Q- | ... of... So, we'll... We'll 'coter' this |  |
| 10 | exposed to an oral contraceptive for two (2) |  | 10 | Etminan Study as I-2 to the... to the |  |
| 11 | years? |  | 11 | examination. |  |
| 12A- | Right, but that would only be important if you |  | 12 |  |  |
| 13 | believed that one group was more likely to stop |  |  | EXHIBIT I-2: A copy of the Etminan Study. |  |
| 14 | taking the contraceptives than another group, |  | 14 |  |  |
| 15 | and I didn't see that as being a bias in this |  | 15 Me | GENEVIEVE BERTRAND: |  |
| 16 | study. |  | 16 Q- | And l've provided you with a copy, Doctor, and |  |
| 17 Q - | Okay. |  | 17 | so I'm... |  |
| 18A- | In fact, those sorts of issues really add what |  | 18 A - | Yes. |  |
| 19 | we call background noise to a study, they reduce |  | 19Q- | ... referring you to Table 3 of... |  |
| 20 | the likelihood that we'll see an association. |  | 20A- | Yes. |  |
| 21 Q- | But you did mention those things... those two |  | 21 Q- | ... the study at page 903, and more particularly |  |
| 22 | (2) things, the cessation and the switching of |  | 22 | I'm referring you to the Levonorgestrel, which |  |
| 23 | oral contraceptives? |  | 23 | is the first one, and the Norgestrel, which is |  |
| 24 A - | No, because in this... |  | 24 | the last one mentioned on the list... |  |
| 25Q- | Yes, I understand. |  | 25A- | Yes. |  |
|  |  | 70 |  |  | 72 |
| 1 A- | ... particular case, an association was found... |  | 1 Q- | ... and to the adjusted for propensity score... |  |
| 2 Q- | Right. |  | 2 A- | Yes. |  |
| 3 A- | ... and those issues would only weaken the |  | 3 Q- | ... column. |  |
|  | likelihood of finding an association. |  | 4 A- | Yes. |  |
| 5 Q- | Okay. And you didn't mention that there wasn't |  | 5 Q- | Now, do you understand... If I'm talking to you |  |
| 6 | any adjustment made for clinically important |  |  | about the Levonorgestrel and the Norgestrel, do |  |
| 7 | confounders? |  |  | you understand that two (2)... these two (2) |  |
| 8 A- | Such as...? |  |  | compounds that they're comparing? |  |
| 9 Q- | Body mass index... |  | 9 A- | That they're... |  |
| 10A- | They did adjust... |  | 10 Q - | Do you understand, if I'm talking to you about |  |
| 11 Q - | ... diet... |  | 11 | the... If we're comparing Levonorgestrel and |  |
| 12A- | ... for obesity. |  | 12 | Norgestrel, do you understand these two (2) |  |
| 13Q- | ... family history or ethnicity. |  | 13 | compounds? |  |
| 14 A - | There's things that are missing, I absolutely |  | 14 A - | No, I don't. |  |
| 15 | agree with you on that, I mean... But no... no |  | 15Q- | Okay. Do you understand the relationship |  |
| 16 | data set... I've never seen a study that could |  | 16 | between Norgestrel and Levonorgestrel? |  |
| 17 | adjust for absolutely every known potential |  | 17 A - | No, I don't. |  |
| 18 | confounder. |  | 18Q- | So, if I tell you there's only... The only |  |
| 19Q- | Okay, and you didn't mention in your report that |  | 19 | active ingredient in Norgestrel is |  |
| 20 | no medical records were reviewed to confirm the |  | 20 | Levonorgestrel, from a scientific perspective, |  |
| 21 | diagnosis of a gall bladder event? |  | 21 | if you... So, if that is the case... and it is, |  |
| 22 A - | No, but again, if that's the case, it would only |  | 22 | I'm... |  |
| 23 | add background noise to reduce the chance of |  | 23A- | Yes. |  |
| 24 | finding an association, unless you believe one |  | 24 Q- | ... putting it to you that Norgestrel... the |  |
| 25 | group was under-reported or over-reported |  | 25 | only active ingredient is Levonorgestrel. And |  |


|  | 73 |  |  | 75 |
| :---: | :---: | :---: | :---: | :---: |
| 1 from a scientific perspective, if you compare a |  |  | the Levonorgestrel and Norgestrel... In that |  |
| 2 chemical compound to itself, you wouldn't expect |  | 2 | case, comparing two (2) things of the same |  |
| 3 to find a statistically different result, would |  | 3 | nature, you would not expect to find a |  |
| 4 you? |  | 4 | statistically different result in that case |  |
| 5 Me SAMY ELNEMR: |  | 5 | normally, would you? |  |
| 6 If we look... |  | 6 A- | No, you wouldn't. |  |
| 7 Me GENEVIEVE BERTRAND: |  | 7 Q- | You wouldn't. |  |
| 8 So... |  | 8 A- | If it's the same... If it's the same thing, it's |  |
| 9 Me SAMY ELNEMR: |  | 9 | the same thing. |  |
| 10 I'm sorry, you're going to have to repeat |  | $10 \mathrm{Q}-$ | And the fact that they looked at the same |  |
| 11 that... |  | 11 | compound and they found a statistical difference |  |
| 12A- Yes. |  | 12 | shows in this case that there must have been |  |
| 13 Me GENEVIEVE BERTRAND: |  | 13 | bias, correct? |  |
| 14 Okay, so l'll start over. |  | 14 A - | It doesn't mean there's bias, it could also |  |
| 15 So, we're comparing here, in this table... |  | 15 | mean... When you do an analysis... When you do |  |
| 16 I'm referring Dr. Grover to Table 3, the |  | 16 | an analysis where you're looking at multiple |  |
| 17 Levonorgestrel and the Norgestrel, and the |  | 17 | comparisons, there is a risk of... there is a |  |
| 18 adjusted for propensity score in that table. |  | 18 | risk of a comparison being positive just on |  |
| 19 Q- Do you understand what an adjusted for |  | 19 | chance alone. |  |
| 20 propensity score is? |  | 20Q- | As we... So, it could be chance... |  |
| 21A- Yes. |  | 21 A- | Yes. |  |
| 22Q- Okay. |  | 22 Q- | ... or it could be the... |  |
| 23A- I don't consider... |  | 23A- | Could be bias. |  |
| 24Q- So... |  | 24 Q- | ... fact that there are bias? |  |
| 25A- ... though, the adjusted propensity score being |  | 25A- | But there's no obvious bias to me, here. |  |
|  | 74 |  |  | 76 |
| 1 the most important column in that table. |  | 1 Q- | Okay, so it's chance or bias. But if... Is that |  |
| 2 Q- Let me ask you the question, and... and then |  |  | correct, sir? |  |
| 3 we'll... |  | 3 A- | But it's also... You have to be clear here that, |  |
| 4 A- Yes. |  |  | relatively speaking, the comparison between |  |
| 5 Q- ... okay, we'll move on. |  |  | Norgestrel and Levonorgestrel, whether you agree |  |
| 6 So, we're comparing these two (2) |  |  | there is an association or there isn't, it's a |  |
| 7 compounds, Levonorgestrel... |  |  | weak one, and it depends on which analysis you |  |
| 8 A- Yes. |  | 8 | look at. The adjusted for propensity score |  |
| 9 Q- ... and Norgestrel. The only active ingredient |  | 9 | shows a very marginally significant result, the |  |
| 10 in Norgestrel is Levonorgestrel. |  | 10 | adjusted... |  |
| 11A- Yes. |  | 11 Q- | Yes. |  |
| 12 Me SAMY ELNEMR: |  | 12A- | ... rate score doesn't show a statistically |  |
| 13 Is that a fact? |  | 13 | significant result, and the crude rate shows a |  |
| 14 Me GENEVIEVE BERTRAND: |  | 14 | marginally statistically significant result. |  |
| 15 It is a fact, and I'm putting it to Dr. Grover, |  | 15 | So, if you'd asked me to comment on the |  |
| 16 but what's important is the next question. |  | 16 | comparison between Norgestrel and |  |
| 17 Me SAMY ELNEMR: |  | 17 | Levonorgestrel, I would have said it's more |  |
| 18 Go ahead. |  | 18 | borderline... more unclear. |  |
| 19 Me GENEVIEVE BERTRAND: |  | 19 Q- | Okay, and other than chance or bias, are there |  |
| 20Q- You would understand from a scientific |  | 20 | other reasons the... there would be a |  |
| 21 perspective... and Dr. Grover, tell me if you |  | 21 | statistically different result for these two (2) |  |
| 22 don't agree... |  | 22 | compounds that are the same? |  |
| 23A- Okay. |  | 23A- | That's the only two (2) that I... |  |
| 24 Q - If you compare a chemical compound to itself... |  | 24 Q - | Okay. |  |
| 25 So, we're comparing two (2) of the same thing, |  | 25A- | ... guess I can think of off the top of my head |  |


|  | 77 |  |  | 79 |
| :---: | :---: | :---: | :---: | :---: |
|  | as chance or bias. |  | not support... |  |
| 2 Q- | And isn't it true that... | 2 A- | Yes, I didn't review that issue. |  |
| 3 A - | Well, misclassification, of course, but... yes. | 3 Q- | Okay. |  |
| 4 Q- | And isn't it true that the authors of the study | 4 A- | I couldn't say. |  |
| 5 | conclude that the small amount of increased | 5 Q- | So, you couldn't say. |  |
| 6 | risk, together with possible biases in the | 6 | And there are no studies that demonstrate |  |
| 7 | study, make the differences in the incidents of |  | an association between Yaz or Yasmin |  |
| 8 | gall bladder disease unlikely to be clinically |  | specifically, and functional gall bladder |  |
| 9 | significant? | 9 | disorder, correct? |  |
| 10A- | That is their conclusion, that's correct. | 10A- | I would argue this one does. |  |
| 11 Q- | So, they candidly admitted that there are biases | 11 Me | SAMY ELNEMR: |  |
| 12 | in their study, and that could have affected the | 12 | Could you specify which one you're talking |  |
| 13 | results of the study? | 13 | about? |  |
| 14 A - | I didn't... they said "compounded with the | 14 A - | I'm sorry, say that again. |  |
| 15 | possibility of residual biases." | 15 M | GENEVIEVE BERTRAND: |  |
| 16Q- | Right. | 16 Q- | So, no studies that would demonstrate a clear |  |
| 17 A - | But the possibility of residual biases are | 17 | association between Yaz and Yasmin and |  |
| 18 | always there in any study, other than a | 18 | functional gall bladder disorder? |  |
| 19 | perfectly... | 19A- | Can you define "functional gall bladder" for me? |  |
| 20 Q- | Yes. | 20 Q- | Disorder... in terms of gall stones, |  |
| 21 A- | ... done randomized control trial. So... | 21 | cholecystectomy, the... |  |
| 22 Q - | Right. | 22 A - | Well, in this study, gall bladder disease was |  |
| 23 A- | ... all they're saying is that this isn't a | 23 | defined as a cholecystectomy. |  |
| 24 | perfect study. | 24 Q- | Okay. The Etminan Study used data from IMS |  |
| 25Q- | Right. | 25 | LifeLink Health Plan Claims Database? |  |
|  | 78 |  |  | 80 |
| 1 | And you would agree with that, that it's | 1 A- | M'hm. |  |
| 2 | not a... it's not a perfect study? | 2 Q- | And... Well, just maybe verbally, if you could |  |
| 3 A | Not... Not a perfect study to prove causality. |  | say "yes"? |  |
| 4 Q- | Okay. So, there... The existing literature does | 4 A- | Yes. |  |
| 5 | not support that low doses of estrogen -- we're | 5 Q- | Yes. |  |
| 6 | talking about estrogen this time -- used in | 6 A- | Sorry. |  |
| 7 | modern oral contraceptives, including Yaz or | 7 Q- | And you won an award from IMS Health Canada in |  |
| 8 | Yasmin, are associated with an increased risk of |  | the past, correct? Do you recall that? |  |
| 9 | gall bladder disease, compared to non-use of | 9 A - | Oh, yes. Yes, you're right, I... |  |
| 10 | oral contraceptives? | 10Q- | Do you recall that? |  |
| 11 A - | Well, I wouldn't say that, because... | 11 A - | ... did, actually. |  |
| 12 Q - | Okay. | 12 Q | And... |  |
| 13 A - | ... this study actually found an association, | 13A- | You're right, I did. |  |
| 14 | and... | 14 Q - | ... do you have any affiliations with... |  |
| 15Q- | But we're talking about estrogen, not progestin. | 15A- | No, none... |  |
| 16 |  | 16 Q- | ... IMS? |  |
| 17 A - | Oh, I'm sorry. Sorry, say that... | 17 A - | ... whatsoever. |  |
| 18Q- | So, I'll repeat... | 18 Q- | Okay. |  |
| 19A- | Repeat it again? | 19 |  |  |
| 20 Q- | ... the question. | 20 | (DISCUSSION OFF RECORD) |  |
| 21 A- | Yes. | 21 |  |  |
| 22 Q- | So, in terms of the literature... So, we're | 22 Me | GENEVIEVE BERTRAND: |  |
| 23 | switching from progestin -- which is the Etminan | 23Q- | So, Dr. Grover, just to come back to your |  |
| 24 | Study -- to estrogen, and my question is, so the | 24 | earlier conclusion for Ms. Gladu, I want to |  |
| 25 | existing literature, as far as you've seen, does | 25 | clarify that you agree that Ms. Gladu... So, her |  |


|  | 81 |  | 83 |
| :---: | :---: | :---: | :---: |
| 1 | factors, the obesity, the surgery, the | 1 Q- Yes. |  |
| 2 | immobilization, the infection, were more likely | 2 A- At very least, you wouldn't expect that the gall |  |
| 3 | to have caused a thrombotic event than her use | 3 bladder would be taken out in the absence of |  |
| 4 | of an oral contraceptive? | 4 gall stones. At very least they would have |  |
| 5 A- | Yes. | 5 known they had gall stones. |  |
| 6 Q- | You agree with that, okay. | 6 Q- So, we will suspend the examination and |  |
| 7 | And in discussing the Jick Study, and not | 7 'sujet'... subject to the... the undertaking to |  |
| 8 | comparing the women that were on or off oral | 8 be provided. |  |
| 9 | contraceptives, you said that all the women are | 9 We thank you for your time today, Dr. |  |
| 10 | similar... Surely, you didn't mean... or didn't | 10 Grover... |  |
| 11 | suggest that all of the women taking an oral | 11 Me SYLVIE RODRIGUE: |  |
| 12 | contraceptive are all obese, or all smokers, or | 12 Thank you. |  |
| 13 | have the same risk factors as Ms. Gladu... | 13 Me GENEVIEVE BERTRAND: |  |
| 14 A - | No. | 14 Q- ... we appreciate it. |  |
| 15Q- | ... or Guindon? That's not what you meant? | 15 |  |
| 16A- | I meant more similar in the sense that they all | 16 AND FURTHER DEPONENT SAITH NOT |  |
| 17 | decided to take oral contraceptives. | 17 --------------- |  |
| 18Q- | Right. Okay. | 18 |  |
| 19 | And when you said that all of the flaws in | 19 |  |
| 20 | the Etminan Study, including the dose, the | 20 |  |
| 21 | proper diagnosis of gall bladder disease, the | 21 |  |
| 22 | duration of taking the oral contraceptive... You | 22 |  |
| 23 | said that all of this was background noise and | 23 |  |
| 24 | that it only strengthened the association in the | 24 |  |
| 25 | Etminan Study. | 25 |  |
|  | 82 |  | 84 |
| 1 | Now, if there's no proper diagnosis, for | 1 |  |
| 2 | example, doesn't it tell you that there's a weak | 2 I, ASTRIDA AUZA, Official Court Reporter in the |  |
| 3 | association because it could be someone without | 3 Judicial District of Montreal, hereby certify that |  |
| 4 | gall bladder disease that was included in the | 4 the foregoing pages are a true and accurate |  |
| 5 | study? | 5 transcription of the mechanical recording, to the |  |
| 6 A- | Sorry, when you say poor... When you say "weak | 6 best of my skill, ability, and understanding. |  |
| 7 | diagnosis"... their diagnosis was on the basis |  |  |
| 8 | of cholecystectomy, so unless you believe some | 8 And I have signed, |  |
| 9 | of these women had a cholecystectomy, but, in |  |  |
| 10 | fact, didn't have gall bladder disease... | 10 |  |
| 11 Q- | Because there was the... | 11 ASTRIDA AUZA |  |
| 12A- | Yes. | 12 Official Court Reporter |  |
| 13Q- | That was the... | 13 |  |
| 14 A - | I mean, if we assume that they only take gall | 14 |  |
| 15 | bladders out with people that have | 15 |  |
| 16 | cholecystectomy... | 16 |  |
| 17 Q - | Yes. | 17 |  |
| 18 A - | ... I can't see that they made many mistakes | 18 |  |
| 19 | here in the diagnosis of gall bladder disease. | 19 |  |
| 20 | Now, I'm sure there are cases where a woman has | 20 |  |
| 21 | her gall bladder taken out, and they | 21 |  |
| 22 | subsequently look and go, "Son of a gun, there's | 22 |  |
| 23 | nothing wrong with this gall bladder." But a | 23 |  |
| 24 | cholecystectomy is a pretty good indicator of | 24 |  |
| 25 | gall bladder disease. | 25 |  |


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## EXHIIBIT P-12

Research paper published in the Canadian Medical Association Journall, dated May 17, 2011

# Oral contraceptives and the risk of gallbladder disease: a comparative safety study 

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#### Abstract

Background: Recent concerns have been raised about the risk of gallbladder disease associated with the use of drospirenone, a fourthgeneration progestin used in oral contraceptives. We conducted a study to determine the magnitude of this risk compared with other formulations of oral contraceptives. Methods: We conducted a retrospective cohort study using the IMS Lifelink Health Plan Claims Database. We included women who were using an oral contraceptive containing ethinyl estradiol combined with a progestin during 1997-2009. To be eligible, women had to have been taking the oral contraceptive continuously for at least six months. We computed adjusted rate ratios (RRs) for gallbladder disease using a Cox proportional hazards model. In the primary analysis, galibladder disease was defined as cholecystectomy; in a secondary analysis, it was defined as hospital admission secondary to gallbladder disease. Results: We included 2721014 women in the rohort, 27087 of whom underwent surgical or laparoscopic cholecystectomy during the fol-low-up period. Compared with levonorgestrel, an older second-generation progestin, a small, statistically significant increase in the risk of gallbladder disease was associated with desogestrel (adjusted RR 1.05, 95\% confidence interval [CI] 1.01-1.09), drospirenone (adjusted RR $1.20,95 \%$ (l 1.16-1.26) and norethindrone (adjusted RR $1.10,95 \% \mathrm{Cl} 1.06-1.14$ ). No statistically significant increase in risk was associated with the other formulations of oral contraceptive (ethynodiol diacetate, norgestrel and norgestimate).

Interpretation: In a large cohort of women using oral contraceptives, we found a small, statistically significant increase in the risk of gallbladder disease associated with desogestrel, drospirenone and norethindrone compared with levonorgestrel. However, the small effect sizes compounded with the possibility of residual biases in this observational study make it unlikely that these differences are clinically significant.


Oral contaceptives are the most popular mode of bith control among women and are used by about 100 million women worldwide. longerem use of these drugs has been associated with a varies of serious where events, including deep wein thrombosis. wroke and pulmonary embolism. In addition. bothestrogen and progesterone have been shown to plas an important role in the formation of gallvones. However, the relative risk of gallbladder dincane asociated with different formulation of oral contraceptives. including newer formulations, is unhnown.

Recemts, there hate been concerns expressed in the media about repoits of gallbladder disease necesblating cholecystectomy associated with the use of droppirenone. a fourth-generation proGestin Droppirenone combined with ethinyl estradiol is primarily marketed as Yaz and Yasmin in Camada and the I nited States and is
one of the most prescribed oral contraceptives in North America, with worldwide sales of \$2 billion in 2009. The scientific evidence on the risk of eallblader disease associated with drospirenone consists of only anecdotal or spontancous reports in databases of adverse drug events.

A possible linh between drospirenone and gallbladder disease may lead to cholecystectomy and possible surgical complications." If there were a substantial risk of gallbladder disease with drospirenone. this might influence its overall risk benefit ratio and could prompt physicians to prescribe safer alternatives. (iiven that women using oral contraceptives have been found to be at increased rish of gallbladder discase compared with women not using oral contraceptives,' any excess risk associated with the use of drospirenone merits quantification within the contex of a comparative safety study.

## Methods

## Data sources

We obtained data from the IMS I ifel Link Health Plan Clams Database. This database is the largest of its hind in the United States and captures health information on about 78 million residents representing all geographic areas in the country (midwest. $35^{\circ} \%$ northeast, $21^{\%}$ south.引1"o: uest. $13 \%$. Data are captured longitudinall. with an average enrolment period of two Sears. Data fieds include demographic characteristics dae sex. geographic hocation), prescripbion drues (drue name. quantily. day supply). diagnoses (using the International (lassifieation of Diseases, ninth revision [ICD-9]) and hospital admissions (including visits to an emergenes department and surgical procedures). The database is subject to routine quality checks to ensure the validity and completeness of the data. and it has been used in numerous pharmacoepidemiologic and heath outcome studies." In addition, because the data come from more than $10+$ managed care organizations. they go through rigorous quality chechs before they are incorporated in the main database."

## Study cohort and exposure definition

We conducted a retrospective cohort study. We included all women who were using an oral contraceptive containing ethingl estradiol combined with a progestin during 1997 2009. The prosestims studied were norethindrone. ethynodiol
diacetate. norgestrel. levonorgestrel, norgentimate, desogestrel and drospirenone.

Cohort entry was defined as the indes date (baseline), which oceurred after 180 days of continuous exposure to a study drug. We excluded women who had lesser amounts of exposure. To avoid misclassification bias, exposed persontime was computed from the inder date. This approach allowed for a sustained exposure period without internuptions.

Cohor members were followed to the end of the study period: to the date they switched to another study drug: to discontinuation of a study Irug: to the diagnosis of gallbladder disease: of to the termination of health coverage Becanse gallbladder disease has a slow onset. We extended follow-up for an additional sis months after cohort members had been censored. w observe any new diagnoses of gallbladder disease that may have developed after a study drue was stopped.

## Outcome measures

For the primary analysis, the outcome of gallbladder disease was defined as having had a cholecystectomy. Information on cholecystectomes was ascertained using Current Procedural Terminology (CPT) codes for both surgical and laparoscopic cholecystectomies (CPT codes 47600. 47605.47610 .47612 .47620 .47502. 47563. 47504, 49310. 56340 and 50341 ). These procedure codes are used by surgeons to be reimbursed for their services. They have been

Table 1: Characteristics of women included in the study cohort by type of progestin in oral contraceptive used ( $n=2$ 721014)

| Characteristic | Desogestrel $n=351322$ | Drospirenone $n=448287$ | $\begin{gathered} \text { ETD } \\ n=53244 \end{gathered}$ | Levonorgestrel $n=495748$ | Norethindrone $n=546621$ | Norgestimate $n=722667$ | $\begin{aligned} & \text { Norgestrel } \\ & n=103125 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age, yr, mean (SD) | 28 (6.0) | 28 (6.1) | 29 (5.9) | 29 (6.1) | 30 (5.8) | 27 (5.6) | 29 (6.3) |
| Length of follow-up, d, mean ( SD ) | 363 (479) | 314 (396) | 377 (492) | 357 (471) | 287 (431) | 338 (433) | 351 (470) |
| No. with gallbladder disease | 3911 | 4974 | 632 | 5201 | 4789 | 6432 | 1148 |
| Drug use. \% |  |  |  |  |  |  |  |
| Statin | 0.39 | 0.39 | 0.59 | 0.50 | 0.44 | 0.29 | 0.64 |
| Fibrate | 0.06 | 0.08 | 0.07 | 0.06 | 0.06 | 0.04 | 0.06 |
| Medical history, \% |  |  |  |  |  |  |  |
| Sickle-cell anemia | 0.04 | 0.03 | 0.02 | 0.04 | 0.05 | 0.03 | 0.04 |
| Diabetes mellitus | 3.13 | 3.18 | 3.07 | 3.01 | 3.11 | 2.33 | 3.55 |
| Inflammatory bowel disease | 0.47 | 0.50 | 0.55 | 0.46 | 0.42 | 0.36 | 0.47 |
| Pancreatitis | 0.35 | 0.35 | 0.36 | 0.36 | 0.33 | 0.26 | 0.40 |
| Smoking | 5.00 | 4.60 | 5.65 | 5.29 | 5.01 | 4.65 | 5.91 |
| Obesity | 0.36 | 0.42 | 0.37 | 0.34 | 0.34 | 0.23 | 0.36 |

Note: $E T O=$ exhyodiol dacetate, $S D=$ standard deviation.
shown to be well correlated with gallbladder diseanc and hate been used as a marker in prevous epidemiologer stadies

For the secondary analysis, we considered the outcome as all hospital admissions secondary to qallblader dincase (ICD-9 codes 574 and 575 ).

## Statistical analysis

He used the Cox proportional hazards model to estimate hatard matios for gallbladder disease atholechstectomy or hospital admission secondary to eallibladder disease). We hypothesized that a possible risk of gallbladder disease with use of oral contraceptives would require at least sia monthe of continuous use of these drugs. Thus. exposure was defined at baseline (atter 180 days of čposure). Io aroid misclassification bias. we excluded participants who cither had an event or Foft the whom before 180 days of exposure.

Models were adjusted for available conariates w contol for confounding: the cotariates were age. calendar time. sickle-cell anemia, diabetes mellitus. inflammatory bowel discase obesity. pancreatilis. smoking and use of statins and fibrates. Lesonorgestrel was used as the reference group becatse it is the most common progestin und in oral contraceptices.

As a semsitisity analy sis. we repeated the stud to include women who had two sears of continuou use of oral contateeption We adfuscd all analyes for known contomeders.

As an alternative analysis we developed a propensity score model based on the probability of a participant being eyposed to drospirenone or another oral contraceptive. We then used this propensity soot as an altemate means of adjustme the (ox mokel.

Proportionalit! of hatard, were examined graphically by mans of log log survival curves,
and no meaningful deviations from proportionality were observed after baseline.

As a timal sensitivity analysis. We considered a shon time window in case the association between oral contraceptives and gallbladder disease was due to acute exposure to the study drus. For this analysis, we defined exposure as the first day of exposure to a study drug, and we followed paticipants for 180 days (until censoring. the end of the sudy period or cholecystectomy)

## Results

The cohort included $272101+$ women, with 2460094 person-years of follow-up. 1 total of 27087 women underwent surgical or laparoscopic cholecystectomy. The man time to cholecystectomy was 330 days (median 166 . interquartile range $29+45^{\circ}$ days). The baseline characteristics of the women were comparable across the different iypes of progestins (Table 1). txcept for fibrate use, the covariates used in the multivariable model were associated with an increased rish of gallbladder disease (age. rate ratio |RR| $1.01,95 \%$ contidence interval [CI] 1.01 1.02: reported smoking, RR 2.06, $95^{\circ}$ O (1 1.99 2.14: reported obesity. RR 2.63. $95^{\circ}$ (1) 2.41 2.87: diabetes. RR 1.67. $95^{\circ}$ ० Cl 1.59-1.74: inflammators bowel disease. RR $1.26 .45^{\circ} \mathrm{Cl}$ 1.131 .40 : pancreatitis. RR 9.56. $9.5 \%$ Cl 9.10 10.10. sickle-cell anemia. RR 2.20.95\% C1 1.36 3.43): statin use, RR 1.19.95\% CI 1.07 1.33: and fibrate use. RR 1.01. $95 \% \mathrm{Cl} 0.78 \quad 1.32$ ).

The adjusted RRs for gallbladder discase in the primary analysis, involving women continuously exposed to a study drug for six months. are shown in Table 2 and Figure 1. Compared with the use of levonorgestrel, a small, statistically signifieant increase in the risk of gallbladder disease

| Progestin | Crude rate ratio (95\% CI) | Adjusted rate ratio $\dagger$ (95\% CI) | Adjusted for propensity score |
| :---: | :---: | :---: | :---: |
| Levonorgestrel | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) |
| Desogestrel | 1.03 (0.99-1.08) | 1.05 (1.01-1.09) | 1.03 (0.98-1.07) |
| Drospirenone | 1.39 (1.34-1.44) | 1.20 (1.16-1.26) | 1.13 (1.09-1.18) |
| Ethynodiol diacetate | 1.03 (0.95-1.12) | 1.08 (0.99-1.25) | 1.08 (0.99-1.17) |
| Norethindrone | 1.12 (1.07-1.19) | 1.10 (1.06-1.14) | 1.10 (1.06-1.15) |
| Norgestimate | 0.97 (0.93-1.00) | 1.00 (0.96-1.04) | 0.92 (0.89-0.95) |
| Norgestrel | 1.07 (1.01-1.15) | 1.06 (0.99-1.12) | 1.07 (1.01-1.48) |

[^12]"as associated with the use of desogestrel. drospirenone and norethindrone.

A lotal of 567447 women continuously took an oral contaceptive for $\mathbf{w}$ o years. with 792871 person-sears of follow-up. The mean time to cholecystectomy in this group was 510 days. In this sensitivity analysis, a small. statistically significant increase in the risk of gallbladder disease "as associated with the use of drospirenone and ethynodiol diacetate (Table 3).

The association between drospirenone use and gallbladder disease was reduced in both the adjusted and propensity score models, with a number needed to harm of 550 compared with levonorgestrel. There was no clinically meaningful difference in the rish of gallbladder discase with different oral contraceptives in the propensily soore analesis (Tables 2 and 3).

The results "ere also consitent in the seeondary allalysis. in which the outcome was deflined as hospital admission secondary to gallbladder disease (lable 4 ).

A one-sided lest of interaction did not show imteractions between participants" age and oral contraceptive type.

Finally, the adjusted RRs in the sensitivity analysis for acute exposure showed no association between type of oral contraceptive and gallbladder disease aside from drospirenone, for which a protective effect was observed (desogestrel. RR 0.93.950. C1 0.86 1.00: drospirenone RR 0.87. 95\% C1 $0.81-0.93$ : ethymodiol diacetate. KK 0.92. 950ッ(10.78 1.01: norethindrone. RR 1.10. $95 \%$ Cl 1.041 .18 : norgestimate. RR 0.78. 95\% CI 0.73-0.83: and norgestrel. RR 0.95. $95 \%$ (10.87 1.07).


Figure 1: Risk of gallbladder disease (as defined by occurrence of cholecystectomy) associated with six months of continuous use of oral contraceptives containing different progestins. Women using levonorgestrel served as the reference group. Rate ratios were adjusted for age, calendar time, sickle-cell anemia, diabetes mellitus, inflammatory bowel disease, obesity, pancreatitis, smoking, and use of statins and fibrates. A rate ratio greater than 1.0 indicates an increased risk of gallbladder disease. $\mathrm{Cl}=$ confidence interval, ref = reference group.

## Interpretation

In this large cohort of women using oral contraceptives. we found a small. statistically significant increase in the risk of gallbladder disease associated with desogestrel. drospirenone and norethindrone compared with levonorgestrel. However, this difference is unlikely to be clinically important. Moreover. given the observational nature of this study and the fact that adjusting for covariates leads to estimates being closer to the null suggests that residual confounding may explain, at least in part. these small differences.

Studies have shown that lone-tern use of an oral contraceptive is associated 1 ith an increased risk of gallbladder disease compared with no use. A cohort study using data from the Nurse's Health Studt found a slight increase in the rish of gallstones among women who had used oral contraceptives for 15 sears or longer (RR 1.5. $95^{\circ} \%$ ( 11.102 .20 ) Similarly. a meta-analysis of 26 observational studies found a $30 \%$ increase in the development of gallbladder disease among women who were using oral contraceptives compared with those not taking these drugs. 'Both estrogen and progesterone have been shown to increase the risk of gallstones. Estrogen has been shown to increase cholesterol production in the liver, with excess amounts precipitating in bile and leading to the formation of gallstones.' Progesterone has been shown to decrease gallbadder motility, which impedes bile llow and leads to gallstone formation."

In our study, there was a high discontinuation rate in the primary cohort. such that only $20 \%$ of the original cohort was continuously exposed to an oral contraceptive for two years. Given the likelihood of adverse events and avalability of a wide range of oral contraceptives, women are increasingly unlikels to continue with only one type of oral contraceptive." In one study, up to $46^{\circ}$ a of women who stanted taking an oral contraceptive stopped the drug atter six months."

Our data do not show that the increased risk of gallbladder disease associated with drospirenone is clinically meaningful compared whth other formulations of oral contraceptives. Drospirenone had worldwide sales of $\$ 2$ billion in 2009, making it one of the most preseribed oral contraceptives in North America. The surge in the number of reported cases of gallbladder disease facilitated through the media may have contributed in making drospirenone appear to be associated with a higher risk of gallbladder disease compared with older contraceptives.

## Strengths and limitations

Lse of the MS I ifel ink Health Plan ClaimDatabase allowed in to examine the rith of gallbladder disease among close to 2.5 million "omen contimously exposed to different formufation of oral eontraceptives. including the newer droppiremone. This attribute of the database. cructal in a study comparing the safety of oral contraceptives is difficult or impossible to acheve with other equally valid databases owing (1) sample sise limitations. In addition, the in crease in the risk of eallbladder disease associated with covariates such as reported smoking and obest! is consistent with lindings in the literature and adds face validity to our study."

Weabo took sereral steps to control for confounding bias that mas threaten the validity of pharmacoepidemiologic cohort studies. Bs deign. this stud wa- restricted to all women wing oral contraceptives, allowing study participants to share similar characteristios ( lable 1 ). this lype of reatriction has been used to reduce the risk of confounding by indication in pharmacoepidemiologic studies. The use of an ative comparator will ensure that any confounding by indacation or contraindication is minimized. We abo conducted sensitivity analyses in which we examined the risk of gallhladder dieease with different exposure periods. The slight protective effect obsersed with only one prescrption of drospirenone may have been due to random error or powible channcling bias. including the possibility that clinicians may have been less likely to preseribe droppirenone to women who may have been more prone to gallhladder disease.
lmmertal time bias is another bias that has been noted in tarious phamacoepidemiologic studies. This is a bias whereby wers of a drues mat hate a specious survival adoantage over nonusers by study desien ow ing to misclassitication of exposure time. which mahes the imervention wemp protectioe. In our study, miselassitication was avoded by detining exposure to six months of comtinuous use as well as computing expesed persentime at the inder date.
the prescribing of oral contraceptives may be influenced by heaw marketing from manufactures. Bs controlling for calendar time. We were able to control for secular trends in precribing of oral comtraceptives that mas usually favour the prescribing of one oral contraceptive oser another.

A, "ith all phamanoepidemiologic studies that use claims data. our study has limitations. the ( 1 -4 code for gallbladder disease in most administrative databases. including the IMS Lifel inh Heath Plan Claims Database, have not been validated. This is primarily the reason why
we used CP) (Common Procedures and Terminology) codes for the primary analysis: CPI codes have been shown to be well correlated with gallblader diseance."

Body mass indes and ethnicity are tho variables that we could not control for in this study. Body mass index is a possible confounder because drospirenone was marketed for having the least effect on weight. which may have prompted clinicians to prescribe it to heavier women. Such a bias. if present, would have made drospirenone appear more harmfill with respect to gallbladder disease.

Residual confounding with other known and unknown variables may also have affected our results. For example, our data lached information on diet, which is a potential confounder in this study. Also. we only had data on reported smohing and obesity.

Despite these limitations, given the small magnitude of the relative rishs in this large co-

| Table 3: Risk of gallbladder disease* associated with two years of <br> continuous use of oral contraceptives, <br> by type of progestin |  |  |  |
| :--- | :--- | :--- | :--- |
|  | Crude rate <br> ratio $(95 \% \mathrm{Cl})$ | Adjusted rate <br> ratiot $(95 \% \mathrm{Cl})$ | Adjusted for <br> propensity score |
| Progestin | $1.00($ ref $)$ | 1.00 (ref) | 1.00 (ref) |
| Levonorgestrel | $0.99(0.94-1.04)$ | $1.02(0.96-1.07)$ | $0.99(0.93-1.04)$ |
| Desogestrel | $1.50(1.45-1.60)$ | $1.30(1.23-1.37)$ | $1.19(1.14-1.26)$ |
| Drospirenone | $1.11(1.00-1.23)$ | $1.17(1.06-1.30)$ | $1.17(1.06-1.30)$ |
| Ethynodiol diacetate | $1.02(0.97-1.07)$ | $1.04(0.99-1.10)$ | $1.06(1.00-1.11)$ |
| Norethindrone | $0.95(0.91-0.99)$ | $0.98(0.93-1.03)$ | $0.87(0.83-0.91)$ |
| Norgestimate | $1.09(1.00-1.18)$ | $1.06(0.98-1.15)$ | $1.10(1.01-1.91)$ |
| Norgestrel |  |  |  |

Note: $\mathrm{Cl}=$ confidence interval, ref $=$ reference group.
*Patients with gallbladder disease were defined as those who underwent cholecystectomy. tadjusted for age, calendar time, sickle-cell anemia, diabetes mellitus, inflammatory bowel disease, obesity, pancreatitis, smoking, and use of statins and fibrates.

Table 4: Risk of hospital admission secondary to gallbladder disease associated with six months of continuous use of oral contraceptives, by type of progestin

| Progestin | Crude rate ratio <br> $(95 \% \mathrm{Cl})$ | Adjusted rate ratio* <br> $(95 \% \mathrm{Cl})$ |
| :--- | :--- | :---: |
| Levonorgestrel | 1.00 (ref) | 1.00 (ref) |
| Desogestrel | $0.95(0.94-0.97)$ | $0.99(0.98-1.00)$ |
| Drospirenone | $1.45(1.43-1.46)$ | $1.10(1.09-1.12)$ |
| Ethynodiol diacetate | $0.95(0.93-0.97)$ | $1.04(1.01-1.06)$ |
| Norethindrone | $1.07(1.06-1.08)$ | $1.09(1.08-1.10)$ |
| Norgestimate | $1.00(0.99-1.01)$ | $0.99(0.98-1.00)$ |
| Norgestral | $1.08(1.06-1.10)$ | $1.06(1.05-1.08)$ |

Note $\mathrm{Cl}=$ confidence interval, ref $=$ reference group.
*Adjusted for age, calendar time, sickle cell anemia, diabetes mellitus, inflammatory bowel disease, obesity, pancreatitis, smoking. and use of statins and fibrates.
hort sud, it would require a large and prevalent confounder to alter the interpretation of the stud! data.

## Conclusion

In a large cohort of women using oral contraceptives. We found a small. statistically significant increase in the risk of gallbladder disease associated with the use of desogestrel, drospirenone and norethindrone compared with levonorgestrel. However. the small effect sizes compounded with the possibility of residual biases in this observational study make it unlikely that these differences are clinically significant.

## References

































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Comributors: Mahyar I tmana, Joseph I elaney and James Brophy comorbuted to the stldy concept and desen the aquistom of data and the dratting of the manuscrept All of the authers contributed th, the analsos and interpectation of the data and the crncal revison of the ntanustipt for important inellectual content sll of the authors approsed the linal serion of the manuscript submitted for publicatisn boeeph Delane was reoponsible for the statiotical anatyon and the stud guaramor
Funding: The sudy was funded by an speratus grant proladed in part bi the lond de la recherche en sante du enchee (IRSO), the Ministere de la same el des Senters sociaus and the Mefill I nivessty Heath Comet bames Brophy is the recpuent of a cater awand from the I RSO


## Call for papers: CMAJ Holiday Reading

Hilarity and good humour ... help enormously in both the study and the practice of medicine. - William Osler
Too hot to handle? This is the shocking sort of research that we will seriously consider for CMAJ's 2011 Holiday Reading
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Deadline: October 3, 2011.

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| ALEXANIDRA PATON |
| ET ALS. |
| PETITTIONERS |
| VS. |
| BAYER INC. |
| ET ALS. |
| RESPONDENTS |



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            (articles 357 et 358 C.p.c.)
            Partie appelante
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[^0]:    1 L'avis de jugement est daté du 9 août 2018.

[^1]:    ${ }^{1}$ Les demandeurs ont partiellement modifié les questions proposées le 30 janvier 2018.
    ${ }^{2}$ Thromboembolie artérielle (TEA).
    ${ }^{3}$ Thromboembolie veineuse (TEV).
    ${ }^{4}$ Maladie de la vésicule biliaire (MVB).

[^2]:    ${ }^{5}$ Ann Schwoob et al v. Bayer Inc., 2013 ONSC 2207.
    ${ }^{6}$ Dembrowski v. Bayer Inc., 2016 SKQB 324.

[^3]:    ${ }^{7}$ Union des consommateurs c. Bell Canada, 2012 QCCA 1287, par. 117 (autorisation de pourvoi à la C.S.C. rejetée). Voir également: Infineon Technologies AG c. Option consommateurs, [2013] 3 R.C.S. 600, par. 60.
    ${ }^{8}$ Infineon Technologies AG c. Option consommateurs, précité à la note 7, par. 61-67; Sofio c. Organisme canadien de réglementation du commerce des valeurs mobilières (OCRCVM), 2015 QCCA 1820, par. 26.
    ${ }^{9}$ Pharmascience inc. c. Option Consommateurs, 2005 QCCA 437, par. 24.
    ${ }^{10}$ Vivendi Canada Inc. c. Dell'Aniello, [2014] 1 RCS 3, par. 37.
    ${ }^{11}$ Infineon Technologies AG c. Option consommateurs, précité à la note 7, par. 59.
    ${ }^{12}$ Fortier c. Meubles Léon Itée, 2014 QCCA 195, par. 68-70. Option Consommateurs c. Bell Mobilité, 2008 QCCA 2201, par. 37-38; Infineon Technologies AG c. Option consommateurs, précité à la note 7, par. 69

[^4]:    ${ }^{13}$ Lambert (Gestion Peggy) c. Écolait ltée, 2016 QCCA 659, par. 27-28.
    ${ }^{14}$ Paris c. Lafrance, 2011 QCCS 4619, par. 48-49.
    ${ }^{15}$ Tonnelier c. Québec (Procureur général), 2012 QCCA 1654, par. 59.
    ${ }^{16}$ Option Consommateurs c. Merck \& Co. inc., 2013 QCCA 57, par. 25. Voir également : Abicidan c. Bell Canada, 2017 QCCS 1198, par. 11, et Robillard c. Société canadienne des postes, 2017 QCCS 2707, par. 14.

[^5]:    ${ }^{17}$ Déclaration sous serment modifiée du Dr André Masse, MD, CSPQ, FRCSC, datée du 17 juin 2016, à la page 5.
    ${ }^{18}$ Déclaration sous serment du Dr Steven A. Grover, datée du 19 août 2016, aux pages 2 et 3.
    ${ }^{19}$ Déclaration sous serment modifiée du Dr André Masse, MD, CSPQ, FRCSC, datée du 17 juin 2016, à la page 6.

[^6]:    ${ }^{20}$ Déclaration sous serment du Dr Steven A. Grover, datée du 19 août 2016, à la page 4.
    ${ }^{21}$ Asselin c. Desjardins Cabinet de services financiers inc., 2017 QCCA 1673. Voir également : Groupe Vision New Look inc. c. Léveillé, 2018 QCCA 819, par. 6.
    ${ }^{22}$ Pfizer inc. c. Sifneos, 2017 QCCA 1050, par 15-22. Voir également : Asselin c. Desjardins Cabinet de services financiers inc., précité à la note 21, par. 34ss.
    ${ }^{23}$ Infineon Technologies AG c. Option consommateurs, précité à la note 4, par. 149.
    ${ }^{24}$ Lavoie c. Saint-Mathieu-de-Beloeil (Corp. municipale de), J.E. 2002-586 (C.S.), par. 137.

[^7]:    ${ }^{25}$ Jasmin c. Société des alcools du Québec, 2015 QCCA 36, par. 43.
    ${ }^{26}$ Option Consommateurs c. Bell Mobilité, précité à la note 12.
    ${ }^{27}$ Lévesque c. Vidéotron, s.e.n.c., 2015 QCCA 205, par. 45.
    ${ }^{28}$ Sibiga c. Fido Solutions Inc., 2016 QCCA 1299, par. 101-102.

[^8]:    ${ }^{29}$ Précité, à la note 10.

[^9]:    ${ }^{30}$ RLRQ, Chapitre P-40.1.

[^10]:    ${ }^{31}$ Vermette c. General Motors du Canada Itée, 2008 QCCA 1793, par. 63.

[^11]:    
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[^12]:    Note: $\mathrm{Cl}=$ confidence interval, ref = reference group.

    * Patients with gallbladder disease were defined as those who underwent cholecystectomy.
    rAdjusted for age, calendar tirne, sickle cell anema, ciabetes mellitus, inflammatory bowel disease, ohesity, pancreatitis. smoking, and use of statms and fibrates.

