

Thrombopénie immunologique

Actualités, traitements de seconde ligne

XIV^o Congrès Maghrébin d'Hématologie

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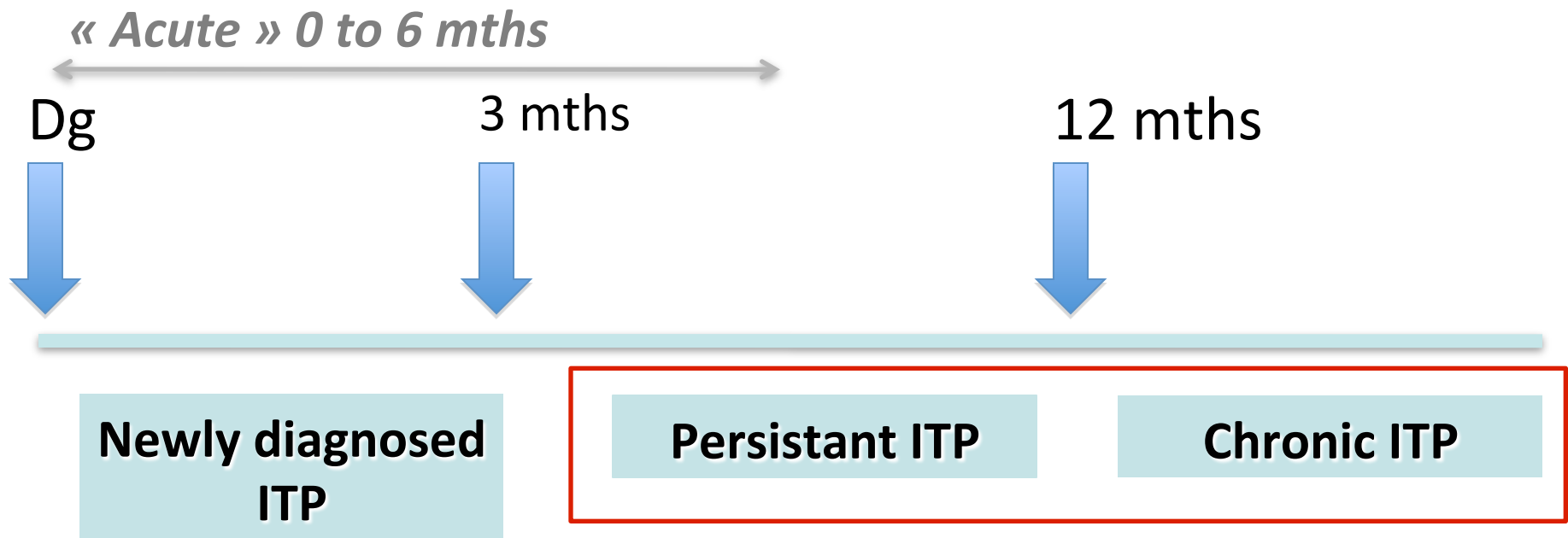


Standardization of terminology, definitions and outcome criteria in immune thrombocytopenic purpura of adults and children: report from an international working group

F Rodeghiero et al

BLOOD, 12 MARCH 2009; 113, 2386-93

ITP duration



Quand traiter ?

Seuil < 30 G/L dans les guidelines

(British Haematology Task, 2003; Cines & Busnel, 2005; Neunert et al, 2011; Provan et al, 2010); Rodeghiero et al, 2009)v

Le chiffre de plaquettes interprété isolément est un très mauvais facteur pronostique de saignement

Doit on augmenter le seuil chez les sujets âgés ?

Pas de réponse claire

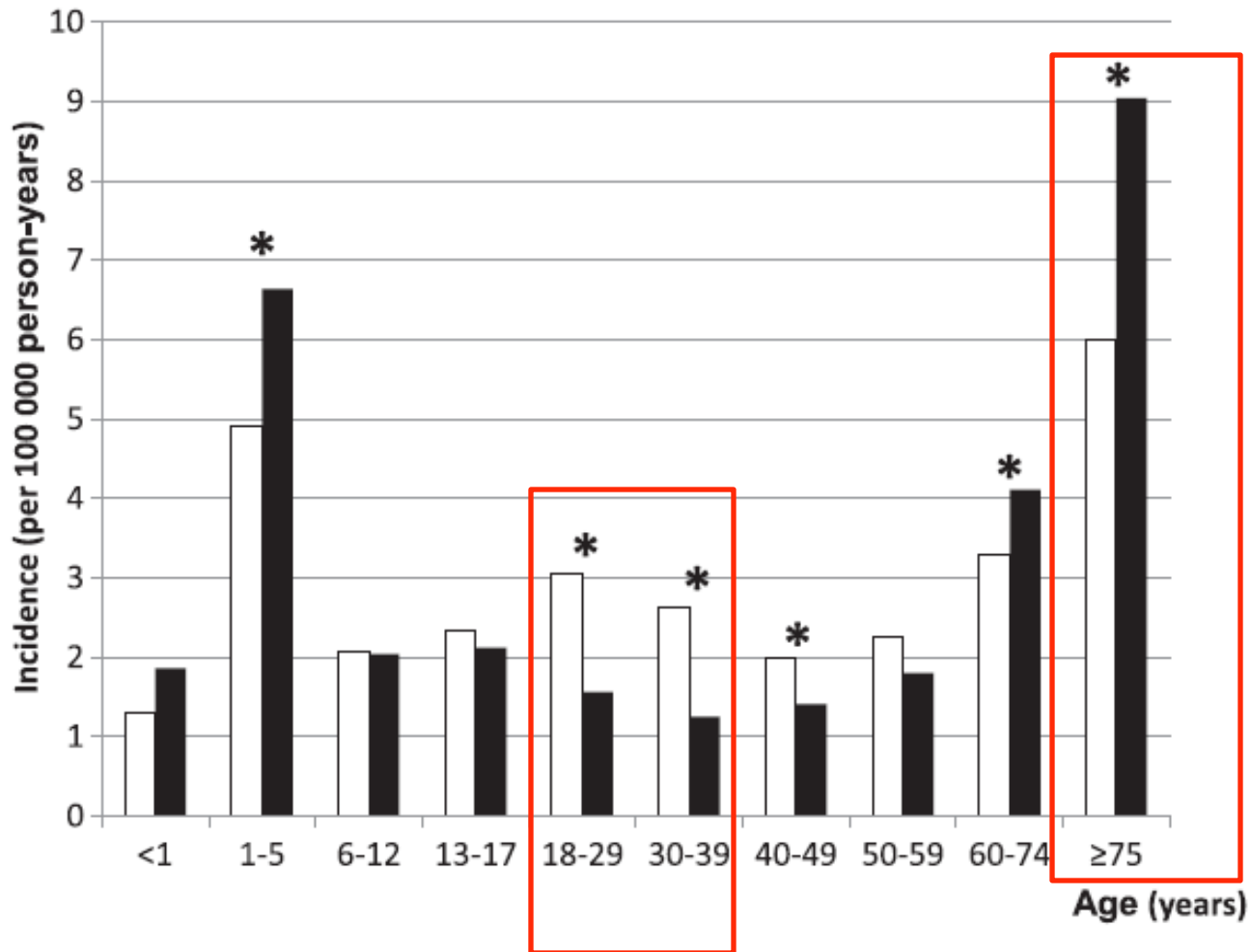
Doit être guidé par le score hémorragique +++++ (Khellaf.2005)

Doit prendre en compte les co-morbidités

Antécédents de saignements

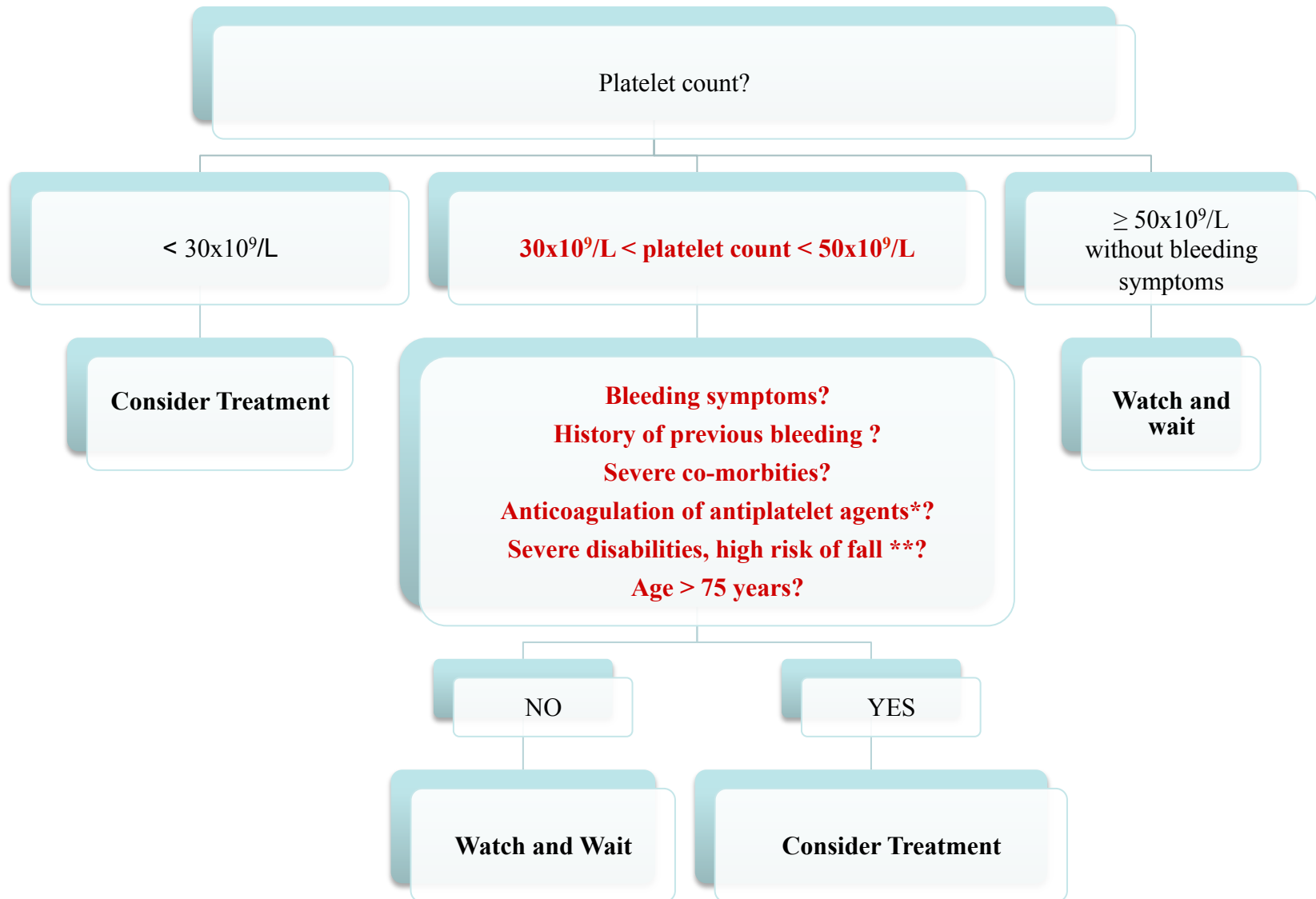
Et les médicaments (Anti-aggrégants, AVK)

PTI, épidémiologie



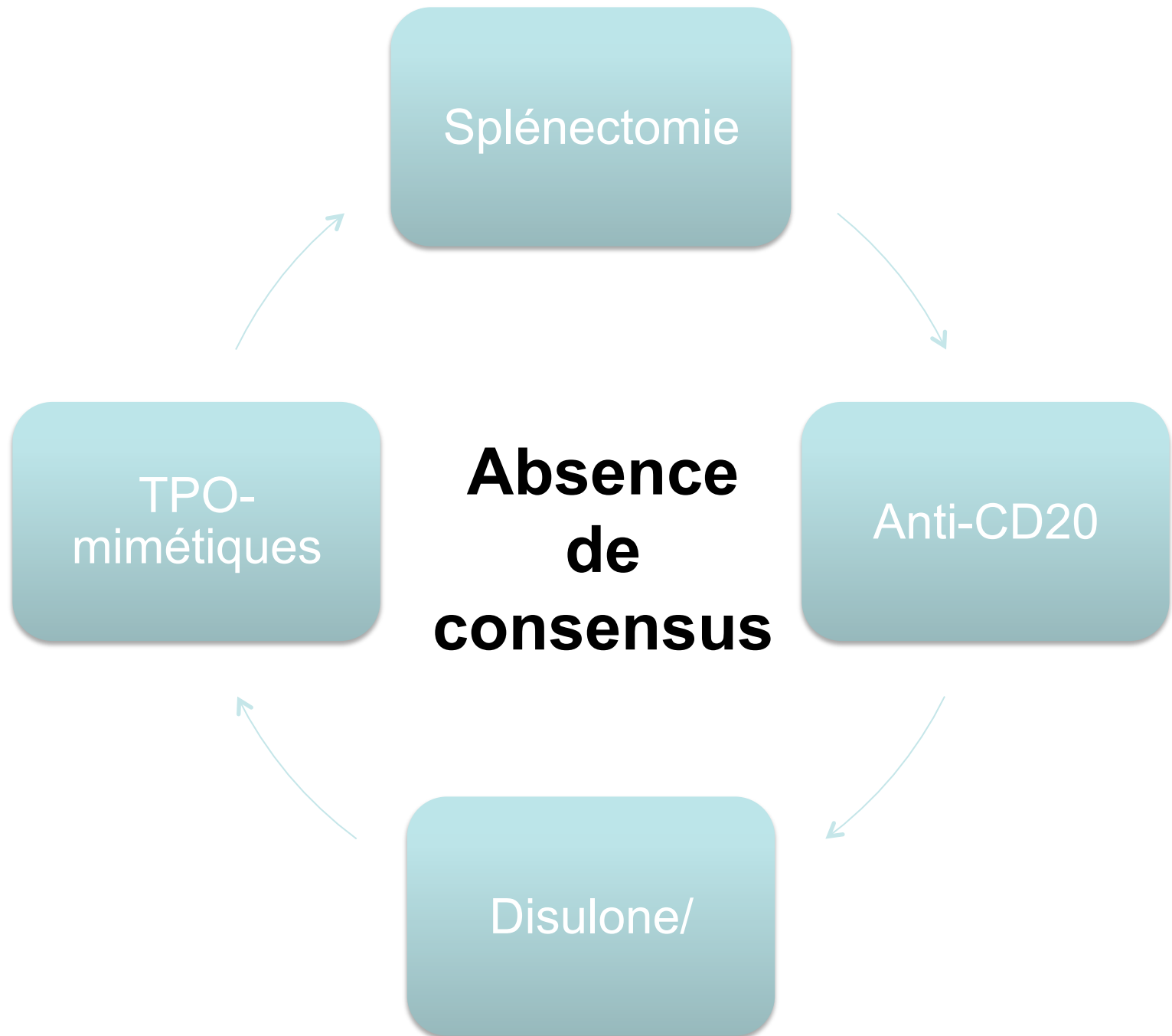
Homme âgé >> Femme jeune
9/100 000 person-years (95% CI: 8.21-9.95)

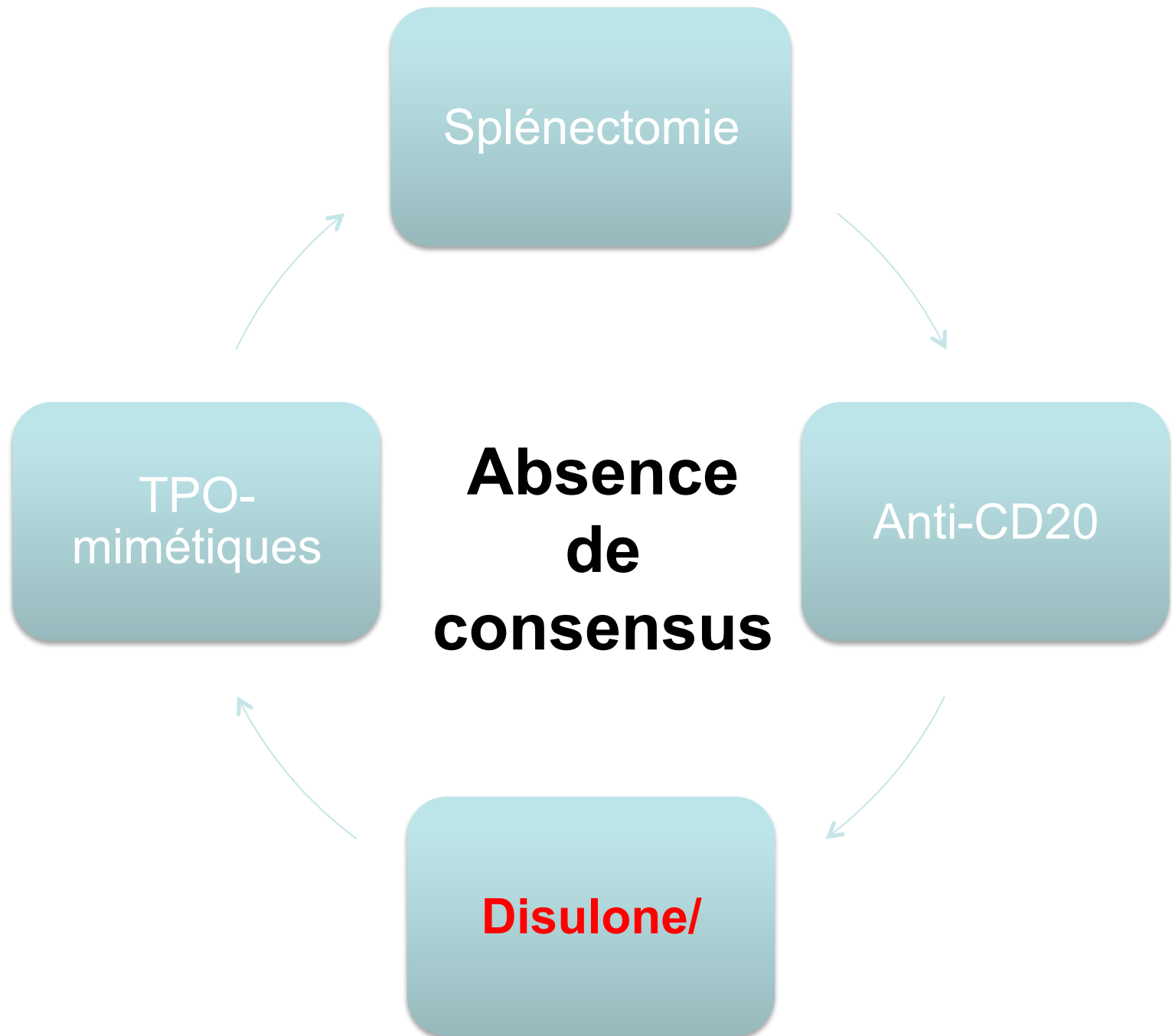
ITP in the elderly: who should be treated?



*: Discuss the possibility to stop the treatment with the cardiologist or the neurologist according to the indication

**: Consider geriatric evaluation





Dapsone et PTI

POUR

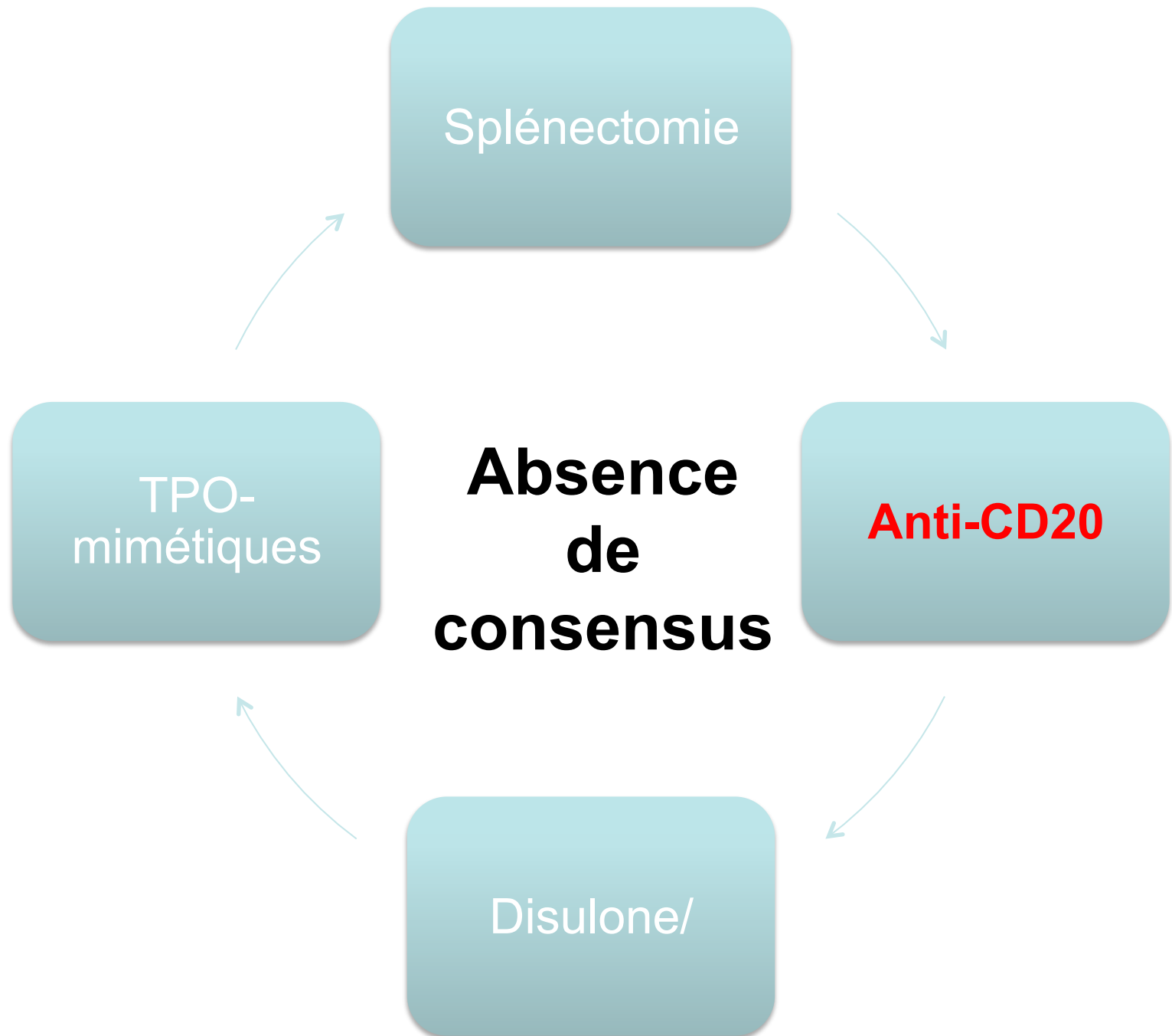
- **30 à 50% de réponse**
- Peu coûteux
- Bien toléré

CONTRE

- Risque cutané +++
- **CI si déficit en G6PD**
- Tolérance chez le sujet âgé
- Rechutes fréquentes à l'arrêt
- Pas d'AMM

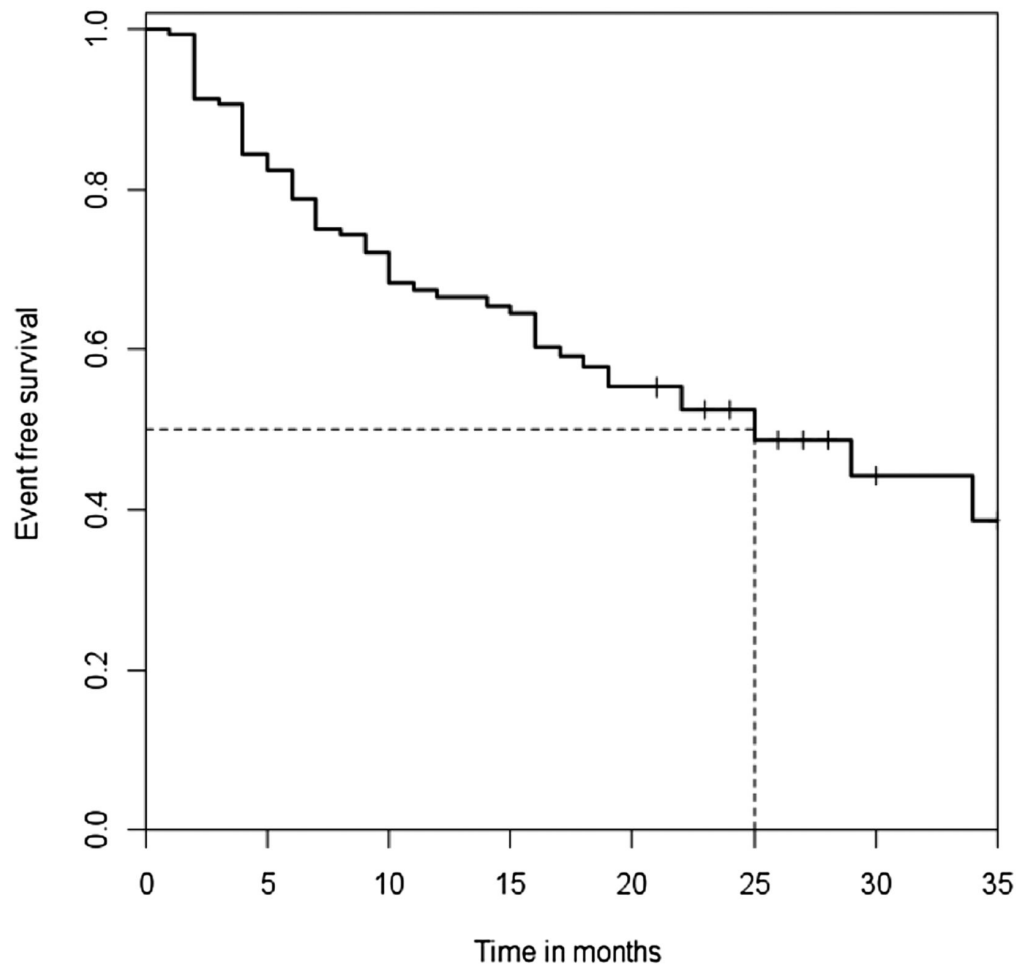


**Plutôt PTI du « jeune » sans
critère de gravité**



Safety and efficacy of rituximab in adult immune thrombocytopenia: results from a prospective registry including 248 patients

Mehdi Khellaf,¹ Anaïs Charles-Nelson,² Olivier Fain,³ Louis Terriou,⁴ Jean-François Viallard,⁵ Stéphane Cheze,⁶ Julie Graveleau,⁷ Borhane Slama,⁸ Sylvain Audia,⁹ Mikael Ebbo,¹⁰ Guillaume Le Guenno,¹¹ Manuel Cliquennois,¹² Gilles Salles,¹³ Caroline Bonmati,¹⁴ France Teillet,¹⁵ Lionel Galicier,¹⁶ Arnaud Hot,¹⁷ Olivier Lambotte,¹⁸ François Lefrère,¹⁹ Salimatou Sacko,² Dieudonné Kilendo Kengue,² Philippe Bierling,^{1,20} Françoise Roudot-Thoraval,²¹ Marc Michel,¹ and Bertrand Godeau¹



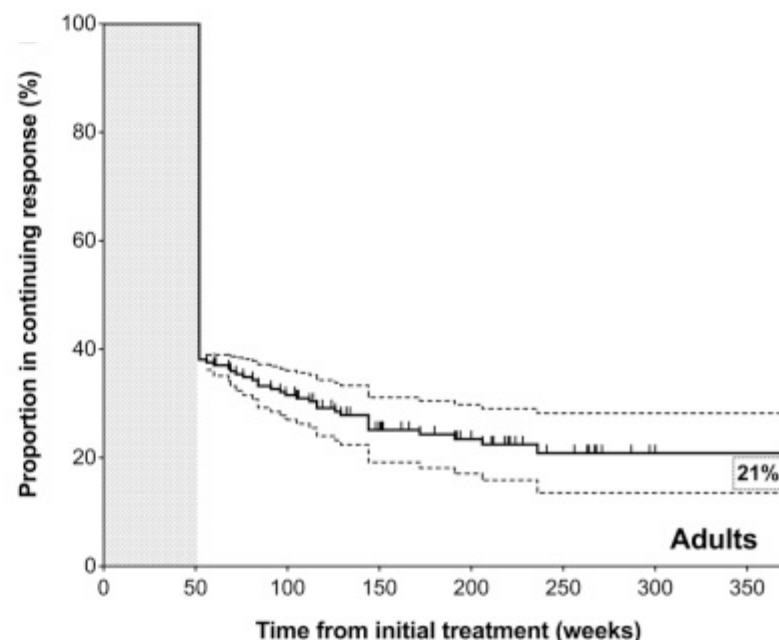
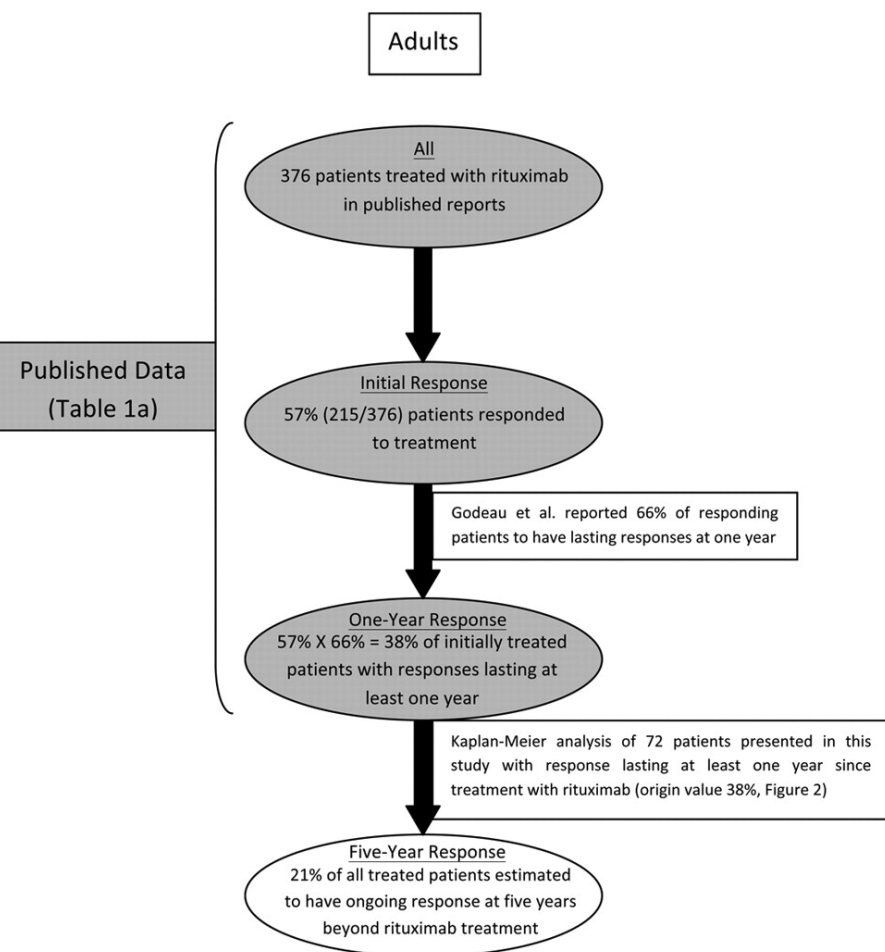
Tolérance : Bonne

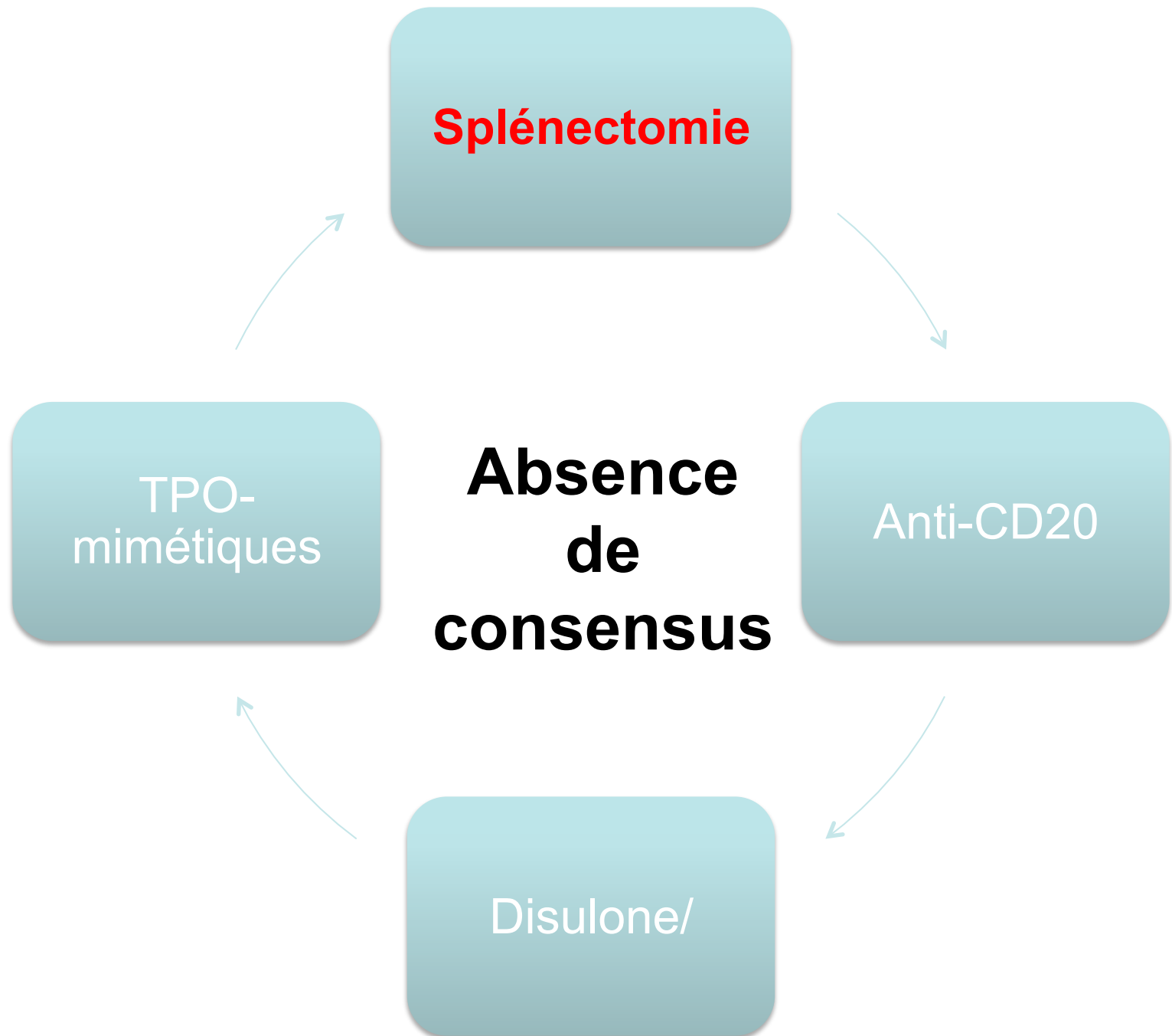
RTX 1g X2 et 375 mg/m²:
équivalents

Outcomes 5 years after response to rituximab therapy in children and adults with immune thrombocytopenia

Vivek L. Patel,¹ Matthieu Mahévas,² Soo Y. Lee,¹ Roberto Stasi,³ Susanna Cunningham-Rundles,¹ Bertrand Godeau,² Julie Kanter,⁴ Ellis Neufeld,⁵ Tillmann Taube,⁶ Ugo Ramenghi,⁷ Shalini Shenoy,⁴ Mary J. Ward,¹ Nino Mihatov,¹ Vinay L. Patel,¹ Philippe Bierling,² Martin Lesser,⁸ Nichola Cooper,⁹ and James B. Bussell¹

¹Department of Pediatrics, Division of Hematology/Oncology, Platelet Disorders Research and Treatment Program, Weill Medical College of Cornell University, New York, NY; ²Médecine Interne, Hôpital Henri Mondor, Assistance Publique-Hôpitaux de Paris, Université Paris Est, Créteil, France; ³Department of Medical Sciences, Ospedale Regina Apostolorum, Albano Laziale, Italy; ⁴Pediatric Hematology/Oncology, Washington University School of Medicine, St Louis, MO; ⁵Division of Hematology/Oncology, Children's Hospital, Boston, MA; ⁶Department of Pediatric Oncology/Hematology, Charité University Hospital, Berlin, Germany; ⁷Hematology Unit, Pediatric Department, University of Torino, Torino, Italy; ⁸Biostatistics Unit, Feinstein Institute for Medical Research, North Shore University Hospital, Manhasset, NY; and ⁹Department of Haematology, Hammersmith Hospital, Imperial Healthcare National Health Service Trust, London, United Kingdom





Splénectomie au cours du PTI



?

Efficacité

Tolérance

☐ Réponse à long-terme : 66%

vs

- Ac anti-CD20: 20% à 5 ans
- Agoniste récepteur TPO: réponse dépendante de la poursuite du traitement

(Kojouri K *et al*, Blood, 2004)
(Patel VL *et al*, Blood, 2012)
(Kuter DJ *et al*, BJH, 2013)
(Saleh MN *et al*, Blood, 2013)

☐ Complications à court terme: 12.9%

☐ Complications à long terme:

- ✓ Infection
- ✓ Thrombose
- ✓ Athérosclérose

(Kojouri K *et al*, Blood, 2004)
(Viannelli N *et al*, Haematologica, 2005)
(Thomsen RW *et al*, Ann Intern Med, 2009)
(Schilling RF *et al*, Lancet, 1997)
(Kristinsson *et al*, Haematologica, 2014)
(Thai *et al*, Medicine 2016)

RISQUE INFECTIEUX

La splénectomie expose le patient à un risque accru et avéré d'infections sévères, notamment à germes encapsulés, dans 70% des cas, appelées « Overwhelming Post-Splenectomy Infection » (OPSI) ou « syndrome septique post-splénectomie ». ^(1,2)



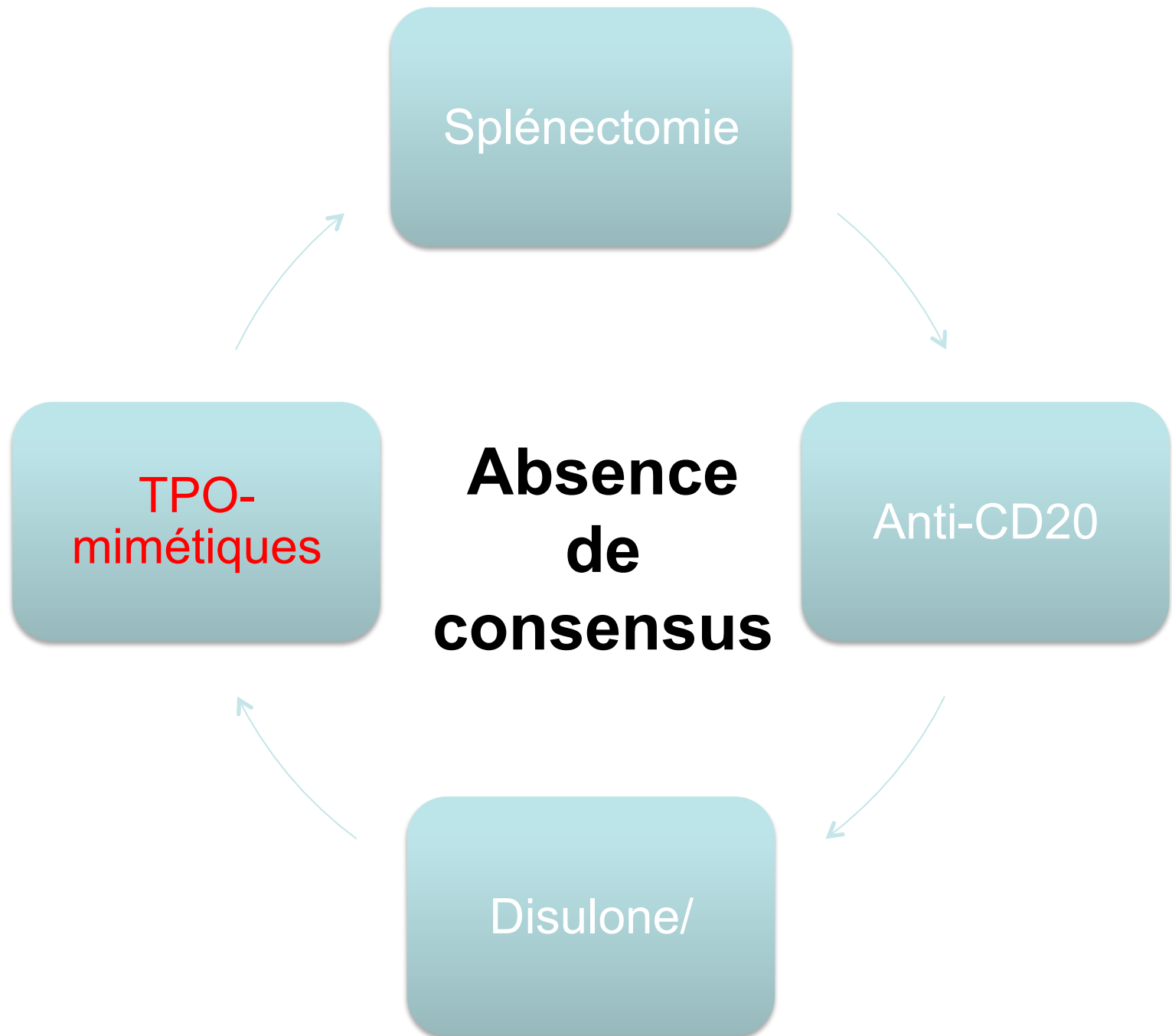
Sepsis sévère, méningite ou pneumopathie sévère à germes encapsulés +++,
Streptococcus pneumoniae,
Haemophilus influenzae, *Neisseria meningitidis*, *E.coli*,
Capnocytophaga,
Mais aussi infections fongiques.

RISQUE THROMBO-EMBOLIQUE

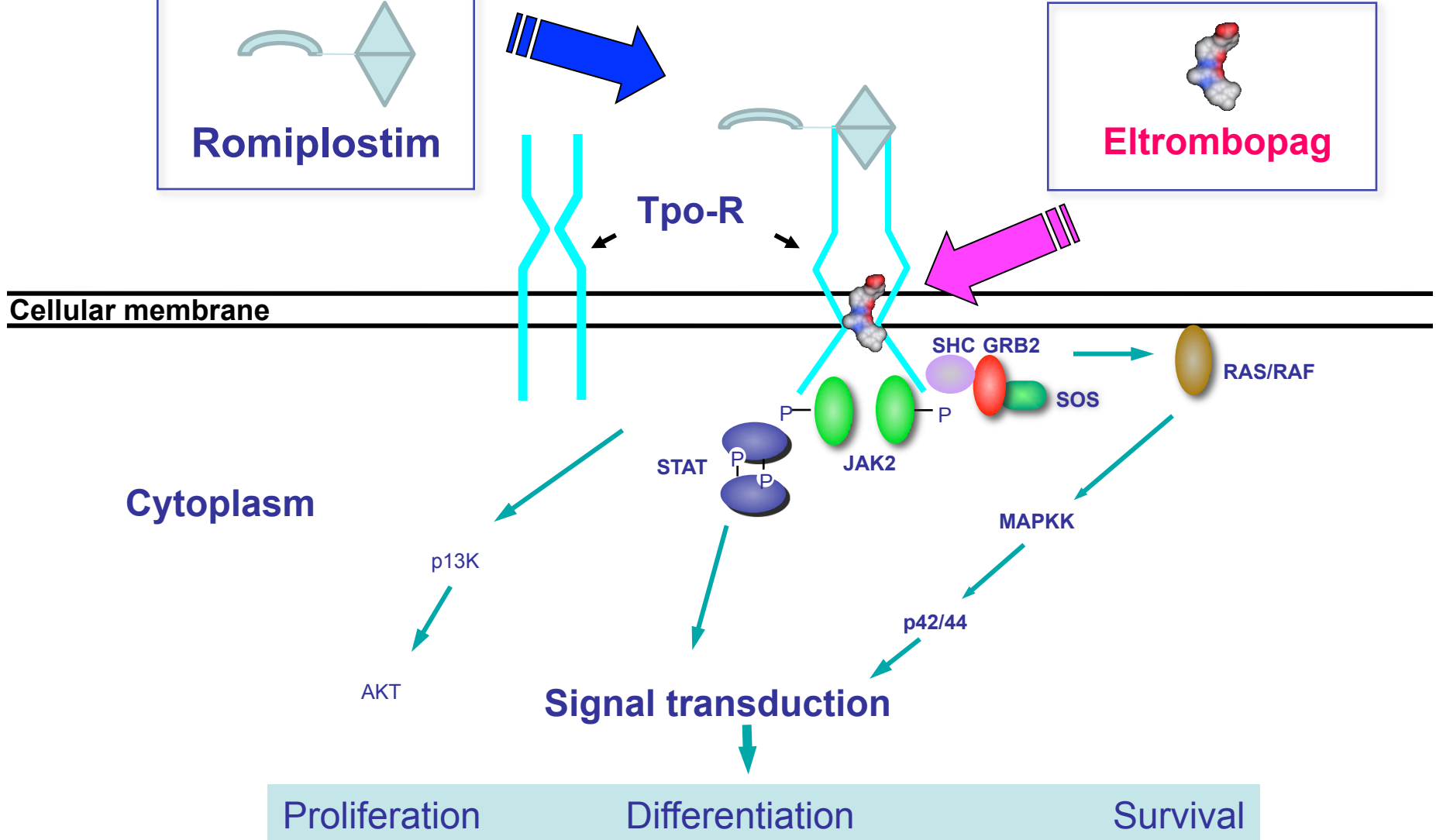
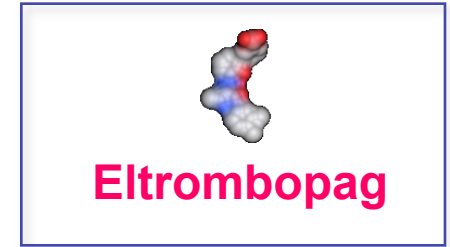
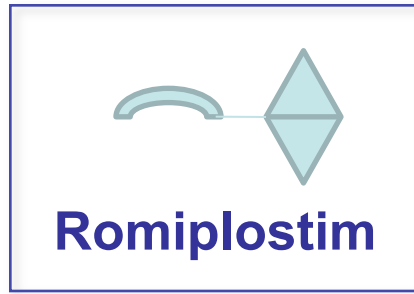
- 16% dans l'étude cas/témoin de Mondor > 10 ans de suivi
- 4.3% dans la grande étude épidémiologique américaine

Pas associé au chiffre de plaquettes et au nombre de lignes de traitements.

Pas de différence entre les répondeurs et les non-répondeurs à la splénectomie.

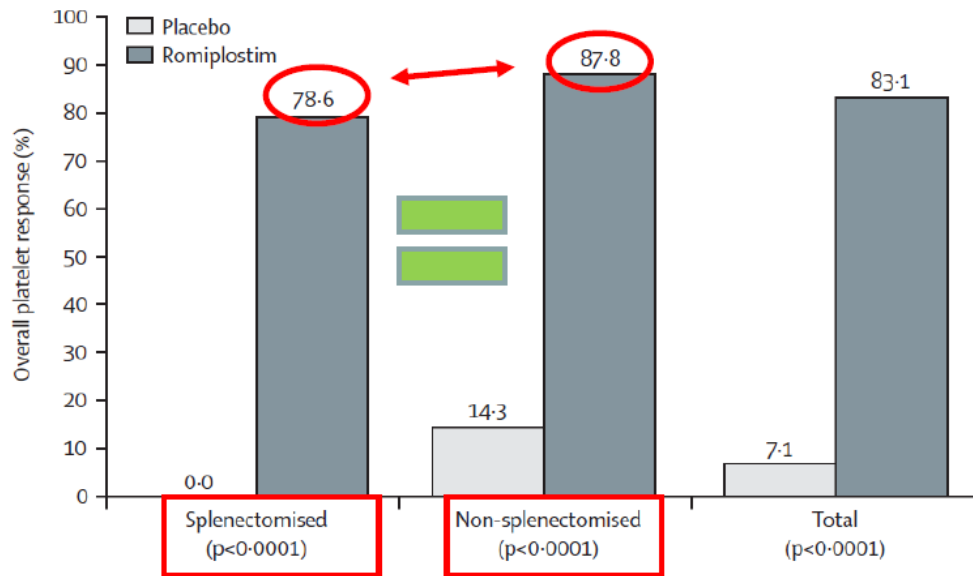


Romiplostim/Eltrombopag



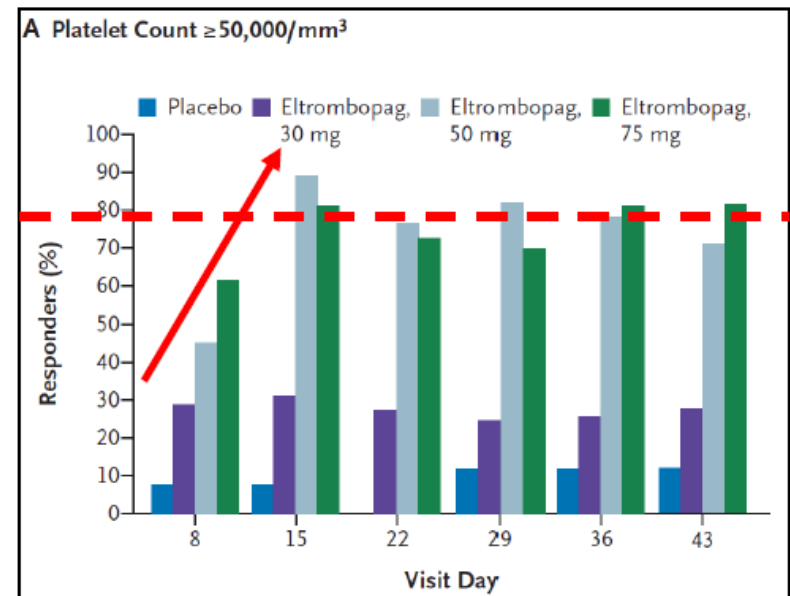
Efficacité à court terme des agonistes du R-TPO

Romiplostim



Kuter, Lancet 2008

Eltrombopag



Bussel, NEJM 2007

Eltrombopag : études cliniques

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Eltrombopag for the Treatment of Chronic
Idiopathic Thrombocytopenic Purpura

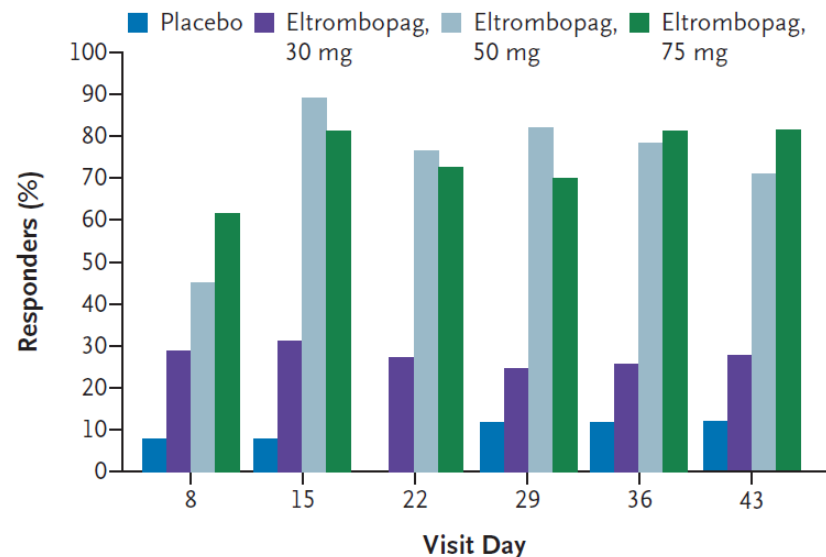
118 PTI > 6 mois, [plaq] < 20 G/L
Splénectomie 50%
4 bras de traitements
Placebo, 30mg, 50mg, 75mg
6 semaines de traitement oral

Efficacité* $\cong$ 80%
Effet dose-dépendant
Réponse en 15 jours
Durable

***Efficacité**

Plaquettes > 50 x 10⁹/L
Et [plaq]_{base} x2

A Platelet Count $\geq 50,000/\text{mm}^3$



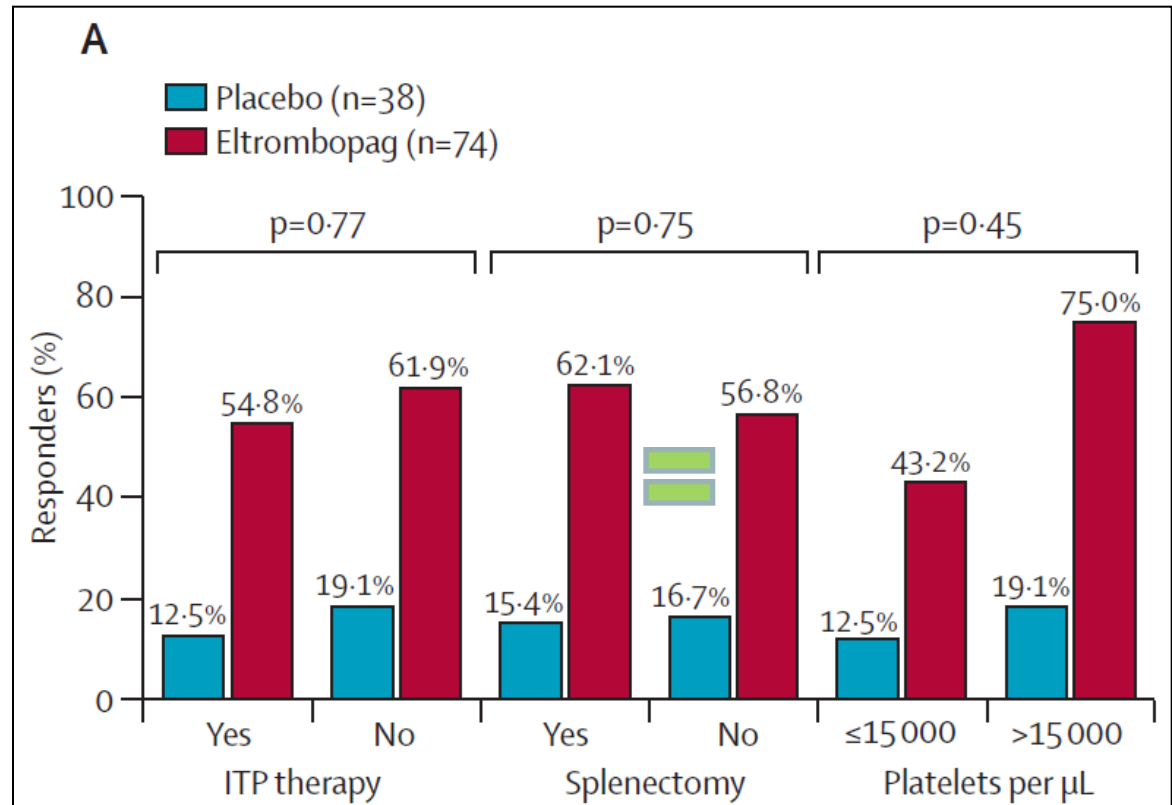
Eltrompobag : études cliniques

112 PTI chroniques
Splénectomies 39%
2:1
50mg puis 75mg
Si pas de réponse
6 semaines de traitement



Dose ↑ 50 → 75mg
+ 29% de répondeurs

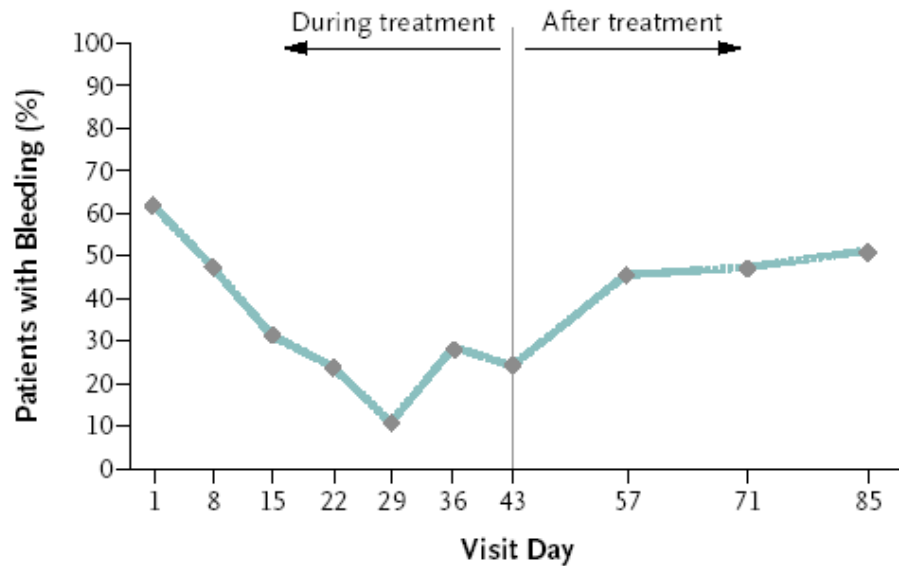
Réponse patients âgés =
patients jeunes



Bussel J, Lancet 2009;373:641-48

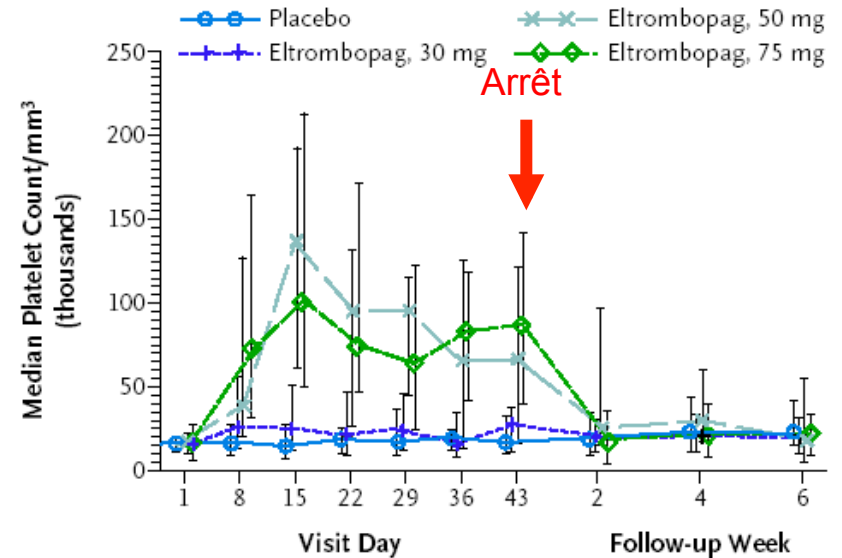
Eltrombopag : études cliniques

C Eltrombopag, 50 mg



**Amélioration
des saignements**

C Median Platelet Count, with the Platelet Counts for the 25th and 75th Percentiles, Observed Data



**Traitement
purement suspensif**

Effets indésirables

Romiplostim

	Placebo (n=41)	Romiplostim (n=84)
Headache	13 (32%)	29 (35%)
Fatigue	12 (29%)	28 (33%)
Epistaxis	10 (24%)	27 (32%)
Arthralgia	8 (20%)	22 (26%)
Contusion	10 (24%)	21 (25%)
Petechiae	9 (22%)	14 (17%)
Diarrhoea	6 (15%)	14 (17%)
Upper respiratory tract infection	5 (12%)	14 (17%)
Dizziness	0	14 (17%)
Insomnia	3 (7%)	13 (16%)
Myalgia	1 (2%)	12 (14%)
Back pain	4 (10%)	11 (13%)
Nausea	4 (10%)	11 (13%)
Pain in extremity	2 (5%)	11 (13%)
Cough	7 (17%)	10 (12%)
Anxiety	5 (12%)	9 (11%)
Gingival bleeding	5 (12%)	9 (11%)
Abdominal pain	0	9 (11%)

Kuter, Lancet 2008;371:395-403

Eltrombopag

	Placebo (n=38)	Eltrombopag (n=76)
Bleeding*	5 (13%)	7 (9%)
Headache	4 (11%)	6 (8%)
Nasopharyngitis	3 (8%)	5 (7%)
Nausea	0	6 (8%)
Diarrhoea	1 (3%)	4 (5%)
Protein total increased	1 (3%)	3 (4%)
Vomiting	0	4 (5%)
Arthralgia	1 (3%)	2 (3%)
Fatigue	0	3 (4%)
Myalgia	0	3 (4%)
Abdominal distension	1 (3%)	1 (1%)
Abdominal pain upper	1 (3%)	1 (1%)
Alanine aminotransferase increased	0	2 (3%)

Bussel J, Lancet 2009;373:641-48



Risque théorique de cataracte (rats)
Surveillance Bilan hépatique

NE PAS HESITER A CHANGER D'AGONISTE DU R-TPO

Khellaf *et al*, Haematologica 2013; 98: 881-7.
Gonzalez-Porras JR *et al*, Br J Haematol 2014

A retrospective pilot evaluation of switching thrombopoietic receptor-agonists in immune thrombocytopenia

Mehdi Khellaf,¹ Jean-François Viallard,² Mohamed Hamidou,³ Stéphane Cheze,⁴ Françoise Roudot-Thoraval,⁵ François Lefrère,⁶ Olivier Fain,⁷ Sylvain Audia,⁸ Jean-François Abgrall,⁹ Jean-Marie Michot,¹⁰ Charles Dauriac,¹¹ Sophie Lefort,¹² Emmanuel Gyan,¹³ Mathilde Niaux,¹⁴ Jean-Marc Durand,¹⁵ Laetitia Langulle,¹⁶ David Boutbou,¹⁷ Philippe Bierling,¹⁷ Marc Michel,¹ and Bertrand Godeau¹

¹Department of Internal Medicine, Centre Hospitalier Universitaire (CHU) Henri-Mondor, Assistance Publique-Hôpitaux de Paris (APHP), Université Paris-Est Créteil (UPEC), Créteil; ²Department of Infectious Diseases, CHU Haut-Lévêque, Pessac; ³Department of Internal Medicine, CHU de Nantes, Nantes; ⁴Groupe Francophone des Myélodysplasies (GFM), Caen; ⁵Department of Public Health, UPEC, Créteil; ⁶Department of Hematology, CHU Necker, APHP, Université de Paris-Descartes, Paris; ⁷Department of Internal Medicine, CHU Jean-Verdier, APHP, Université de Paris 13, Bondy; ⁸Department of Internal Medicine, CHU de Dijon, Dijon; ⁹Department of Hematology, Université de Brest, Brest; ¹⁰Department of Internal Medicine, CHU Bicêtre, APHP, Université de Paris Sud, Kremlin-Bicêtre; ¹¹Department of Hematology, CHU Rennes, Rennes; ¹²Department of Hematology, CH de Brive, Brive-La Gaillarde; ¹³Department of Hematology, CHU de Tours, Tours; ¹⁴Department of Hematology, CH Bretagne-Sud, Lorient; ¹⁵Department of Internal Medicine, Hôpital de la Conception, Assistance Publique-Hôpitaux de Marseille, Marseille; ¹⁶Department of Hematology, CHU Saint-Louis, APHP, Université de Paris-Diderot, Paris; ¹⁷Établissement Français du Sang, CHU Henri-Mondor, APHP, Créteil, France

ABSTRACT

Romiplostim and eltrombopag, the first thrombopoietic receptor-agonists with demonstrated efficacy against immune thrombocytopenia in prospective controlled studies, were recently authorized in most countries for adults with chronic immune thrombocytopenia. So far, no data are available about the potential contribution of switching from romiplostim to eltrombopag or vice versa in terms of efficacy or tolerance. Efficacies and tolerance profiles were evaluated for 46 patients who sequentially received both drugs, switching from one to the other. The reasons for switching were: lack of efficacy for 23 patients, platelet-count fluctuations for 11, side effects for 4, and 8 patients' preferences. For 50-80% of the patients, switching from romiplostim to eltrombopag or eltrombopag to romiplostim effectively impacted the platelet count, with fluctuations disappearing in 54% and side effects resolved in 100%. In 80% of the patients, the 2 thrombopoietic receptor-agonists achieved similar response patterns. Our results confirmed that switching from one thrombopoietic receptor-agonist to the other could be beneficial in clinical practice for patients with severe chronic immune thrombocytopenia who failed to respond or experienced adverse events to the first. (ClinicalTrials.gov identifier: NCT01618734).

Introduction

Immune thrombocytopenia (ITP) is an autoimmune disorder characterized by low platelet counts responsible for various degrees of mucocutaneous bleeding.^{1,2} ITP pathophysiology has long been considered to be only a matter of accelerated platelet destruction by platelet-bound antibodies but there is strong evidence to show that it is also associated with impaired platelet production.^{3,4} Most therapies commonly used to treat ITP (e.g. corticosteroids, intravenous immunoglobulins (IVIg), immunosuppressants and splenectomy) are mainly active by reducing the destruction of antibody-coated platelets. In contrast, the novel thrombopoietic receptor-agonists (TPO-RAs) stimulate platelet production.

Two TPO-RAs are now available. Romiplostim is a peptide TPO-RA composed of an IgG Fc fragment to which four 14-amino-acid TPO peptides are attached; one of them activates the TPO-R by binding to the extracytoplasmic domain, just like endogenous TPO.⁵ Romiplostim is administered as a

weekly subcutaneous injection.⁶ Eltrombopag is a non-peptide TPO-RA that is a 442-Da drug that binds to a transmembrane site on the TPO-R, thereby activating it. It is administered daily as an oral tablet.⁷ In randomized-controlled trials, the reported response rates to romiplostim and eltrombopag were 59-88% and this high efficacy was achieved in splenectomized and non-splenectomized ITP patients.⁸⁻¹⁰ In view of these robust data, both drugs have been approved for adult chronic ITP in more than 80 countries and some groups consider them second-line treatment for chronic ITP.¹¹ However, in Europe, they are only authorized for use after splenectomy failure or when splenectomy is contraindicated.

In contrast to these very good results, in an observational study on romiplostim we showed that inefficacy or side effects led approximately one-third of the patients to discontinue treatment.¹² Because romiplostim and eltrombopag bind to different sites on the TPO-R and the 2 molecules have not yet been directly compared, the relevance of switching from one TPO-RA to the other in clinical practice has not been

Use of eltrombopag after romiplostim in primary immune thrombocytopenia

José Ramón González-Porras,¹ María Eva Mingot-Castellano,² Marcio M. Andrade,³ Rafael Alonso,⁴ Isabel Caparrós,⁵ María Carmen Arratibel,⁶ Fernando Fernández-Fuertes,⁷ Blanca José Corti,⁸ Cristina Pascual,⁹ María José Corti,¹⁰ Silvia Bernat,¹¹ Miguel Ángel Fuertes-Palacio,¹² Juan Andrés Vázquez-Paganini,¹³ Pavel E. Olivera,¹⁴ María Teresa Álvarez-Román,¹⁵ Isidro Jarque,¹⁶ Montserrat Cortés,¹⁷ Violeta Martínez-Robles,¹⁸ Francisco Javier Díaz-Gilve,¹⁹ María Calbacho,²⁰ Carmen Fernández-Miñano,²¹ Javier García-Frade²² and Tomás José González-López²³

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²Departament de Hematologia, Hospital Regional Universitario de Málaga, Málaga; ³Departament de Hematologia, Hospital Universitario Miguel Servet, Zaragoza; ⁴Departament de Hematologia, Hospital Universitario Doce de Octubre, Madrid;

⁵Departament de Hematologia, Hospital Virgen de la Victoria, Málaga; ⁶Departament de Hematologia, Hospital Donostia, San Sebastián

(Guipúzcoa); ⁷Departament de Hematologia, Hospital Universitario Insular de Gran Canaria, Las Palmas de Gran Canaria; ⁸Departament de Hematologia, Hospital Príncipe de Asturias, Alcalá de Henares (Madrid); ⁹Departament de Hematologia, Hospital General Universitario Gregorio Marañón, Madrid; ¹⁰Departament de Hematologia, Hospital del Mar, Barcelona; ¹¹Departament de Hematologia, Hospital de La Plana, Castellón;

¹²Departament de Hematologia, Hospital Clínic Lozano Blesa, Zaragoza; ¹³Departament de Hematologia, Hospital Clínic San Carlos, Madrid; ¹⁴Departament de Hematologia, Hospital Vull de Hebron, Barcelona; ¹⁵Departament de Hematologia, Hospital Universitario La Paz, Madrid; ¹⁶Departament de Hematologia, Hospital La Fe, Valencia; ¹⁷Departament de Hematologia, Fundació Hospital Asil de Granollers, Barcelona;

¹⁸Departament de Hematologia, Hospital de Leioa;

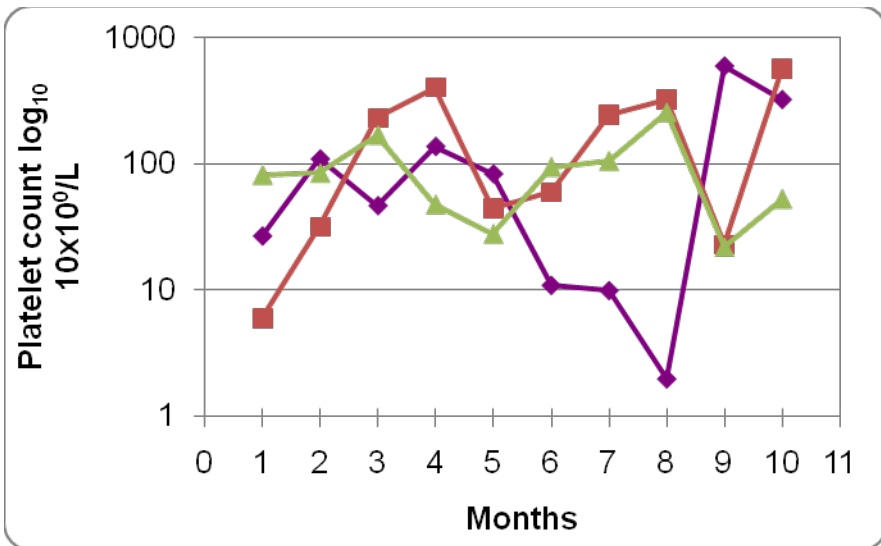
Summary

The thrombopoietin receptor agonists (THPO-RAs), romiplostim and eltrombopag, are effective and safe in immune thrombocytopenia (ITP). However, the value of their sequential use when no response is achieved or when adverse events occur with one THPO-RA has not been clearly established. Here we retrospectively evaluated 51 primary ITP adult patients treated with romiplostim followed by eltrombopag. The median age of our cohort was 49 (range, 18-83) years. There were 32 women and 19 men. The median duration of romiplostim use before switching to eltrombopag was 12 (interquartile range 5-21) months. The reasons for switching were: lack of efficacy ($n = 25$), patient preference ($n = 16$), platelet-count fluctuation ($n = 6$) and side-effects ($n = 4$). The response rate to eltrombopag was 80% (41/51), including 67% ($n = 35$) complete responses. After a median follow-up of 14 months, 31 patients maintained their response. Efficacy was maintained after switching in all patients in the patient preference, platelet-count fluctuation and side-effect groups. 33% of patients experienced one or more adverse events during treatment with eltrombopag. We consider the use of eltrombopag after romiplostim for treating ITP to be effective and safe. Response to eltrombopag was related to the cause of romiplostim discontinuation.

Keywords: immune thrombocytopenia, eltrombopag, romiplostim, efficacy, switching.

FLUCTUATION DU CHIFFRE DE PLAQUETTES

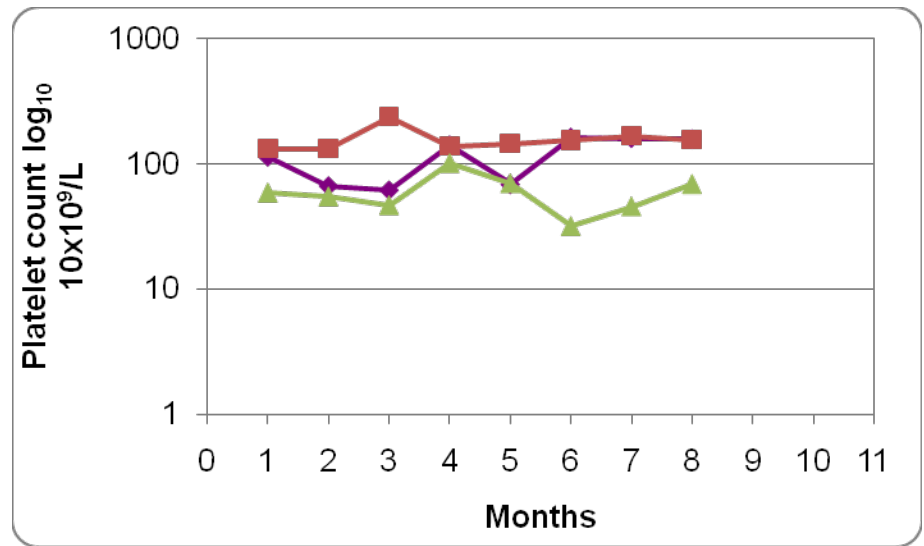
Log Plaq G/L



TPO-r agonist n° 1



Log Plaq G/L



TPO-r agonist n° 2

ELTROMBOPAG A LA PLACE DE ROMIPLOSTIN

Gonzalez-Porras JR et al *et al*, Br J Haematol 2014

Table II. Efficacy of eltrombopag after romiplostim.

Reasons for switching	CR	R	NR	Relapse
Lack of efficacy ($n = 25$)				
Refractory at maximum romiplostim dose ($n = 9$)	2		7	
Refractory at non-maximum romiplostim dose ($n = 4$)	3	1		1 (4 months)
Relapsed after transient response to romiplostim ($n = 12$)*	7	2	3	2 (4, 8 months)
Patient preference ($n = 16$)	14	2		4 (4, 6, 6 and 9 months)
Platelet fluctuation ($n = 6$)	6			2 (2 and 5 months)
Side-effects ($n = 4$)	3	1		1 (7 months)
Total	35 (67%)	6 (12%)	10 (20%)	

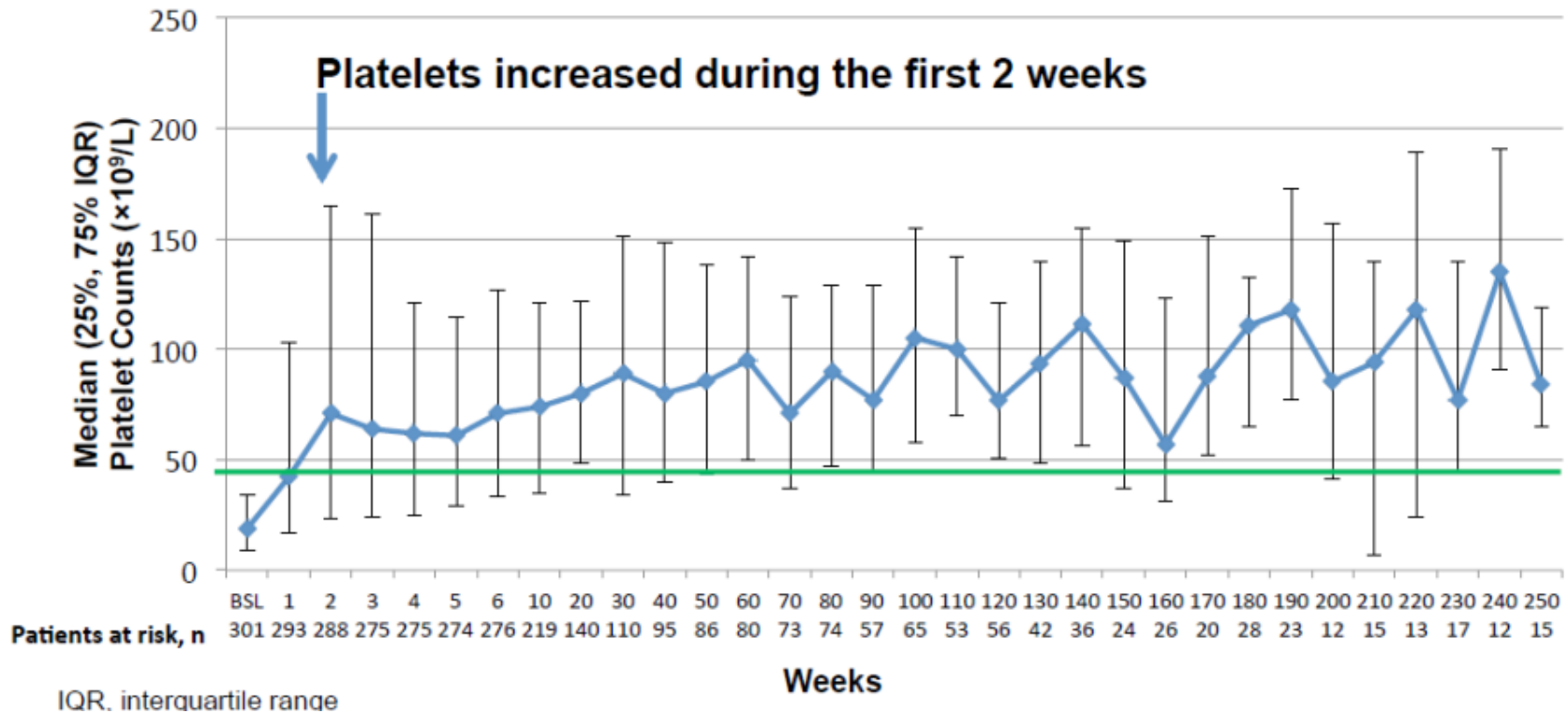
Confirme que le switch est une stratégie satisfaisante

**Les deux agonistes sont très
efficaces à court terme,
plutôt bien tolérés**

Long-terme ???

Extend 2016

- 276/302 (91.4%) achieved platelet counts $\geq 30 \times 10^9/L$ without rescue treatment
- 259/302 (85.8%) achieved platelet counts $\geq 50 \times 10^9/L$ without rescue treatment



Agonistes du R-TPO

Sécurité d'emploi

- Thromboses ?
- Fibroses médullaires réticuliniques ?

Long-term treatment with romiplostim in patients with chronic immune thrombocytopenia: safety and efficacy

Table IV. Thrombotic events.

Thrombotic event	Weeks on treatment in this study	Patient age (years)	Platelet count prior to event, $\times 10^9$ per litre	Days between platelet count and event
Cardiovascular				
Myocardial infarction*	14	61	217	24
Myocardial infarction	108	66	527 ^f	3
Myocardial infarction	23	70	152	0
Myocardial infarction	104	70	5 ^f	1
Myocardial infarction	45	80	274	10
Myocardial infarction	44	83	141	2
Myocardial infarction	60	83	103 ^f	1
Myocardial infarction	84	83	7	1
Myocardial infarction	19	85	948	0
Myocardial infarction*	9	85	20	2
Neurological				
Hemiparesis	169	53	253	9
Transient ischaemic attack	22	57	49 ^f	4
Transient ischaemic attack	26	58	125	4
Cerebrovascular accident	107	63	243	3
Transient blindness	15	63	187	0
Cerebrovascular accident	40	79	142	0
Venous thromboses				
Pulmonary embolism	50	40	312	0
Portal vein thrombosis*	118	44	473 ^f	3
Catheter thrombosis	60	44	7	7
Deep vein thrombosis*	130	44	7 ^f	11
Transverse sinus thrombosis*	52	63	293	5
Deep vein thrombosis	22	67	47	0
Thrombophlebitis	35	69	285	0
Deep vein thrombosis	23	70	152	0
Pulmonary embolism*	80	85	149 ^f	6

*Considered by the investigator as possibly related to study treatment

^fRecorded within 8 weeks of rescue medication use.

IDM

AIT/
AVC

TVP

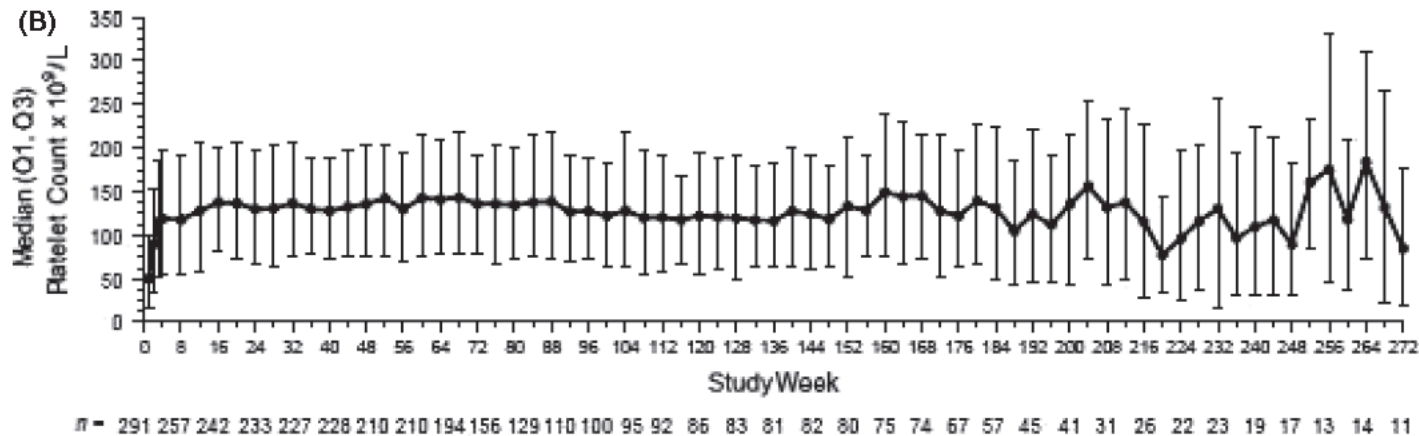
Événements thromboemboliques: 4%
Indépendant du chiffre de plaquettes

EXTEND

Patient no.	Event	Baseline platelet count*	Platelet count prior to/day of the event	Maximum platelet count†	Days to onset	Outcome
1	TIA	13	27	301	59	Resolved
2	PE	15	407	407	58	Resolved
3	DVT	23	248	577	387	Resolved
4	CNS ischemia	25	60	122	971	Not resolved
	Subclavian/brachial vein thrombosis		Unknown		981	Not resolved
5	DVT	26	220	482	134	Resolved‡
	MI		420		362	Resolved
	DVT		482		387	Resolved
6	MI	21	197	364	476	Resolved
7	PE	9	246	246	143	Resolved‡
8	DVT	15	61	108	114	Resolved
9	DVT	13	40	55	279	Not resolved
10	MI	23	146	208	761	Resolved
11	Cerebral infarction	7	143	324	300	Resolved‡
12	Cerebral infarction	25	219	476	244	Resolved‡
13	PE	29	94	304	215	Resolved
	DVT		228	304	229	Resolved
14	Balance disorder, speech disorder, dizziness (suspected PRIND)	14	14	44	1	Resolved
15	DVT (8 d posttherapy)	6	28	40	45	Resolving
16	DVT (7 d posttherapy)	23	214	465	57	Resolved

données de suivi jusqu'à 6,4 ans avec une durée médiane de traitement 122 semaines
 19 patients (6%), incidence de 2,53/100 patient années, IC95% [1,52-3,95]

Long-term treatment with romiplostim in patients with chronic immune thrombocytopenia: safety and efficacy



- 291 patients traités avec romiplostim
- 4/291 dépôts de collagènes (38 BOM)
- Toujours régressif à l'arrêt

Extend study

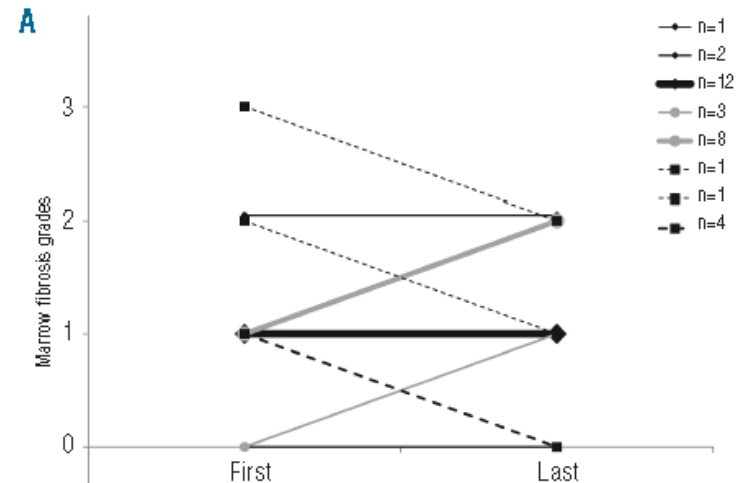
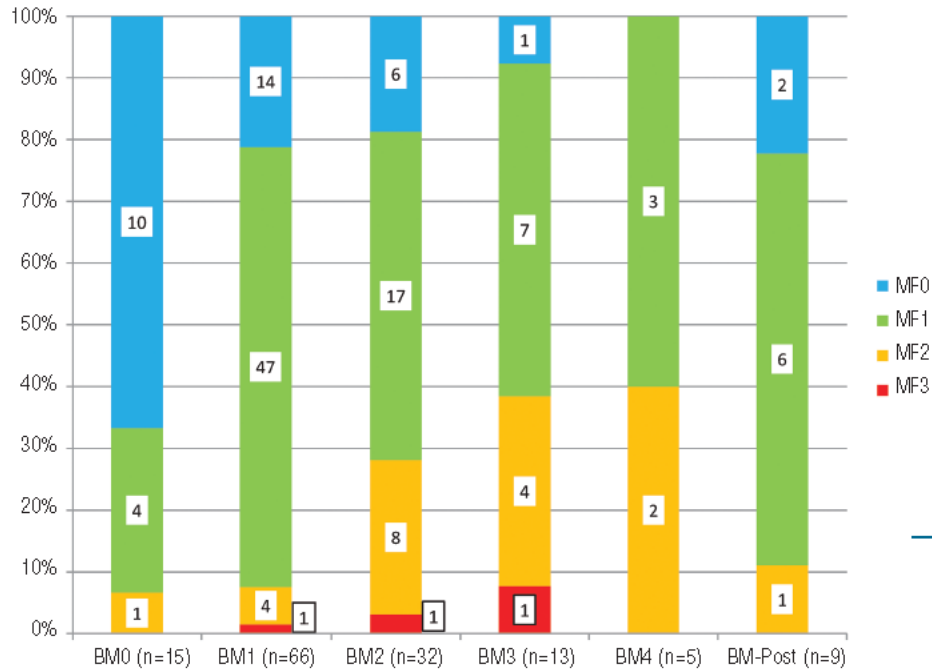
298 patients eltrombopag up to 3 years

- Biopsie ostéo-médullaire: 147 patients
- 8% MF grade 2
- 2 patients avec dépôts de collagène

***« ...for most cITP patients,
treatment with eltrombopag is not
associated with the development of
BM reticulin or collagen fibrosis... »***

Bone marrow fibrosis in 66 patients with immune thrombocytopenia treated with thrombopoietin-receptor agonists: a single-center, long-term follow-up

Waleed Ghanima,^{1,2} Julia Turbinder Geyer,³ Christina S. Lee,² Leonardo Boiocchi,³ Allison A. Imahiyerobo,² Attilio Orazi,³ and James B. Bussel²



Inchangé chez 15/32 avec BOM multiples
3 patients pour lequel le stade MF diminue.

The temporary use of thrombopoietin-receptor agonists may induce a prolonged remission in adult chronic immune thrombocytopenia. Results of a French observational study

REMISSIONS PROLONGEES ?

20/28 CR

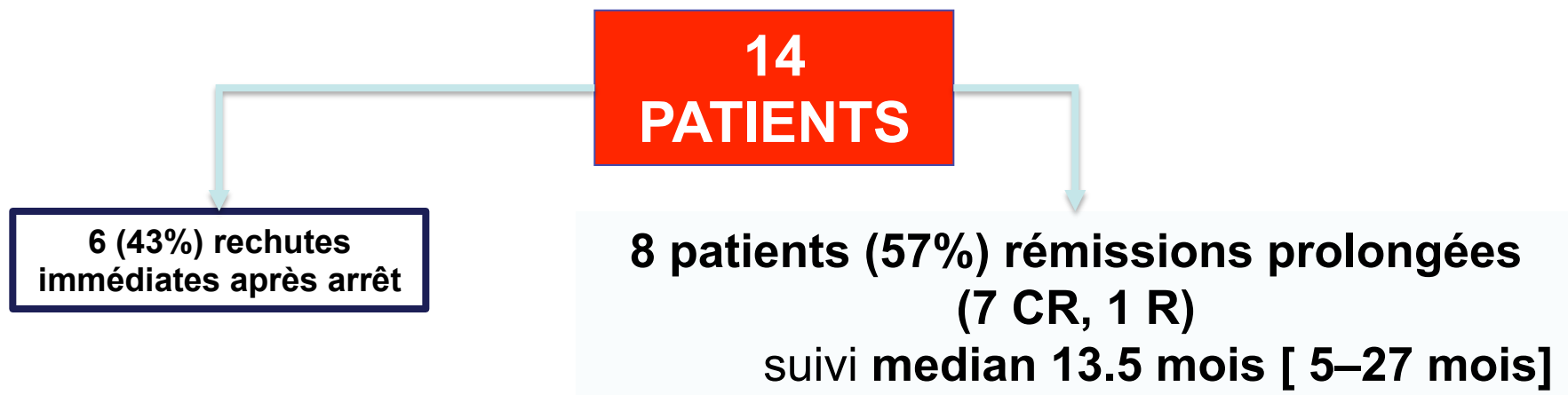
Arrêt TPO-RA

- Réponse persistante malgré diminution de dose (n=10) - Plaquettes > 500 10⁹/L (n=2)	Traitement interférent (RTX, Splénectomie) (n=4)	Thrombose veineuse (n=1) Arrêt par le patient (n=2) raison inconnue (n=1)
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6 patients exclus (RTX ou splénectomie dans les 6 mois précédant l'arrêt de l'agoniste du R-TPO)

14 PATIENTS ANALYSES

The temporary use of thrombopoietin-receptor agonists may induce a prolonged remission in adult chronic immune thrombocytopenia. Results of a French observational study



Tous ces patients avaient un PTI chronique
Durée médiane d'évolution: 103 mois [13–297 mois]
5 lignes thérapeutiques [2–12]

TPO-r agonistes et PTI eltrombopag (Revolade®), romiplostim (Nplate®)

POUR

- Réponse dans 70% des cas
- Efficaces si splénectomie
- Efficace en préparation à la splénectomie
- Réponse soutenue
- Bien tolérés à court terme
- AMM
- Switch possible en l'absence de réponse avec l'un des 2 agonistes disponibles

CONTRE

- Effet suspensif
- Rebond à l'arrêt
- Sécurité à long terme inconnue
- Coût

Questions non résolues

- Causes des échecs
- Réponse à long terme possible ?

Facteurs pouvant être pris en compte dans le choix du traitement de seconde ligne	Traitements de seconde ligne			
	Splénectomie	Rituximab	Agonistes du récepteur de la TPO	Dapsone ou Danazol
Avis et préférence du patient	OUI	OUI	OUI	OUI
PTI ayant une durée d'évolution ≤ 1 an	NON			
Co-morbidité(s) sévère(s)	NON		OUI	
Patient très âgé	NON			
Troubles cognitifs si patient âgé			Préférer le romiplostim à l'eltrombopag	
Espérance de vie limitée	NON		OUI	
Antécédents d'infection sévère, hypogammaglobulinémie, exposition antérieure à une corticothérapie prolongée ou des immunosuppresseurs	À EVITER	À EVITER	OUI	
Antécédents ou facteurs de risque de thromboses veineuses et/ou artérielles	À EVITER	OUI	À EVITER	À EVITER pour le danazol
Site de séquestration splénique ou hépatosplénique aux épreuves isotopiques si elles sont réalisées	OUI			

Le PTI en 2017

Conclusions

Traitement du PTI en 2017:

- **Plus de possibilités, plus complexe!**

Facteurs influençant notre choix?

- Pas seulement le chiffre de plaquettes !:
 - Phase du PTI
 - Sévérité des signes hémorragiques
 - Co-morbidité, âge
 - Qualité de vie, fatigue?
 - Préférences du patient et du médecin
- Coût
- **Restrictions par les autorités de santé ou les compagnies d'assurance**



Traitement
personnalisé

Options thérapeutiques au cours du PTI de l'adulte

