Traitement à long terme de l'OMD : Qu'en attendre en vraie vie ?

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Lyon 1

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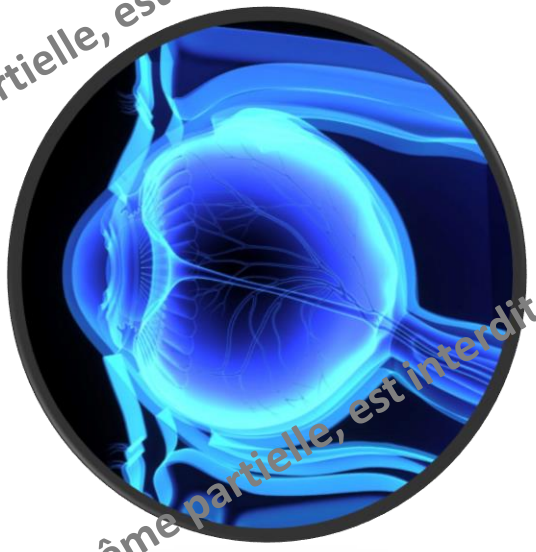
Déclaration d'intérêts

- AbbVie
- Alcon
- Allergan
- Bayer
- Horus
- Krys
- Roche
- Novartis
- Théa



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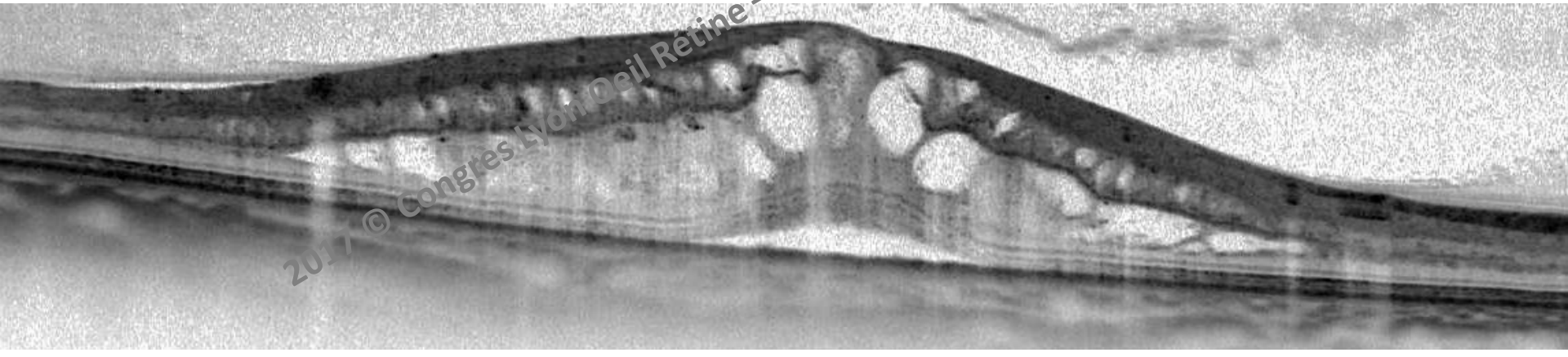

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INTRODUCTION MÉTHODOLOGIQUE

	études INTERVENTIONNELLES	études OBSERVATIONNELLES
Définition	Essais cliniques, randomisation et contrôle	Aucune obligation de traitement, la **vraie vie**
Abréviation	RCT : randomized controlled trial	RLE : real-life evidence
Population étudiée	Patients particuliers (**critères inclusion et exclusion**), sélection par l'étude	**DIVERSITÉ des patients inclus** (patients tout-venant), sélection par le médecin
Avantages	Études propres avec réduction des biais (placébo…), donc niveau de preuve plus élevée **GOLD STANDARD pour AMM**	long terme, fardeau du traitement et qualité de vie, nouveaux effets secondaires, utiles pour les payeurs, comparaison des pays
Inconvénients	**Population sélectionnée et motivée**, court ou moyen terme	**Biais potentiellement nombreux** (données manquantes, PDV), niveau de preuves parfois faible (cas cliniques < registres administratifs < études rétrospectives < prospectives observationnelles)

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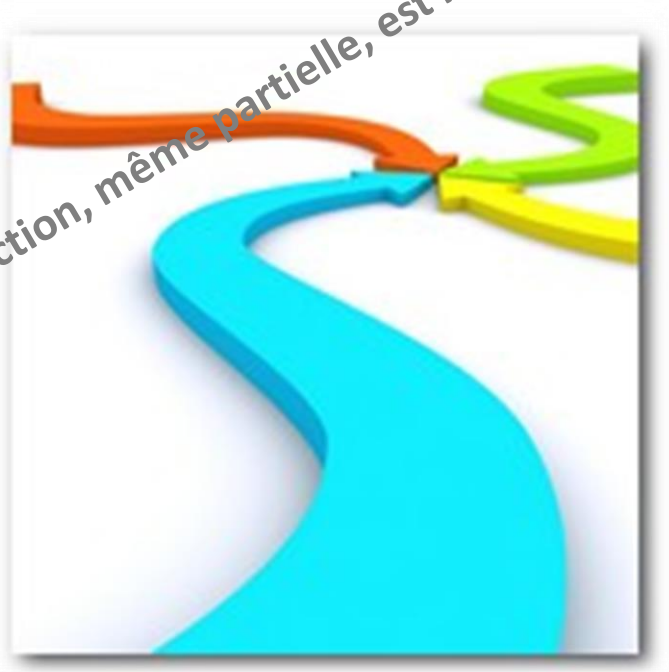
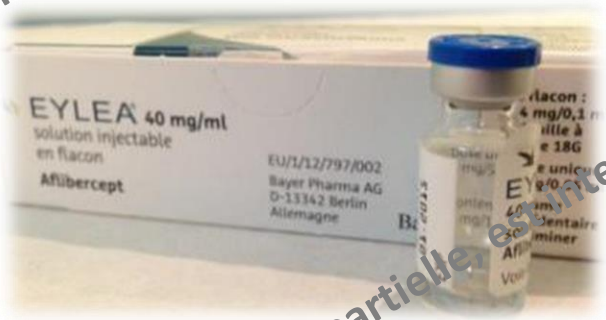
Par conséquent,

- Les études observationnelles de vraie vie ont un niveau de preuve plus faible que celui des études interventionnelles
- MAIS nous (médecins, patients, société, payeurs) avons besoin des études de vraie vie

- **Et si beaucoup d'études de vraie vie vont dans la même direction** (résultats identiques)**, on peut légitimement penser que cette direction est la bonne** (ces résultats sont les bons) **!**



Molecules currently available in France
(label & remboursement)



Interventional studies

RESTORE

RISE & RIDE

RETAIN

TREX

DRCR.net
Diabetic Retinopathy
Clinical Research Network

PROTOCOLE I

PROTOCOLE T

VIVID

VISTA

Apollon …

Observational studies

Luminous,
Boreal, Etoile,
Polaris …

MEAD

MAGGIORE

BEVORDEX

Reldex, Mozart,
Prediamex …

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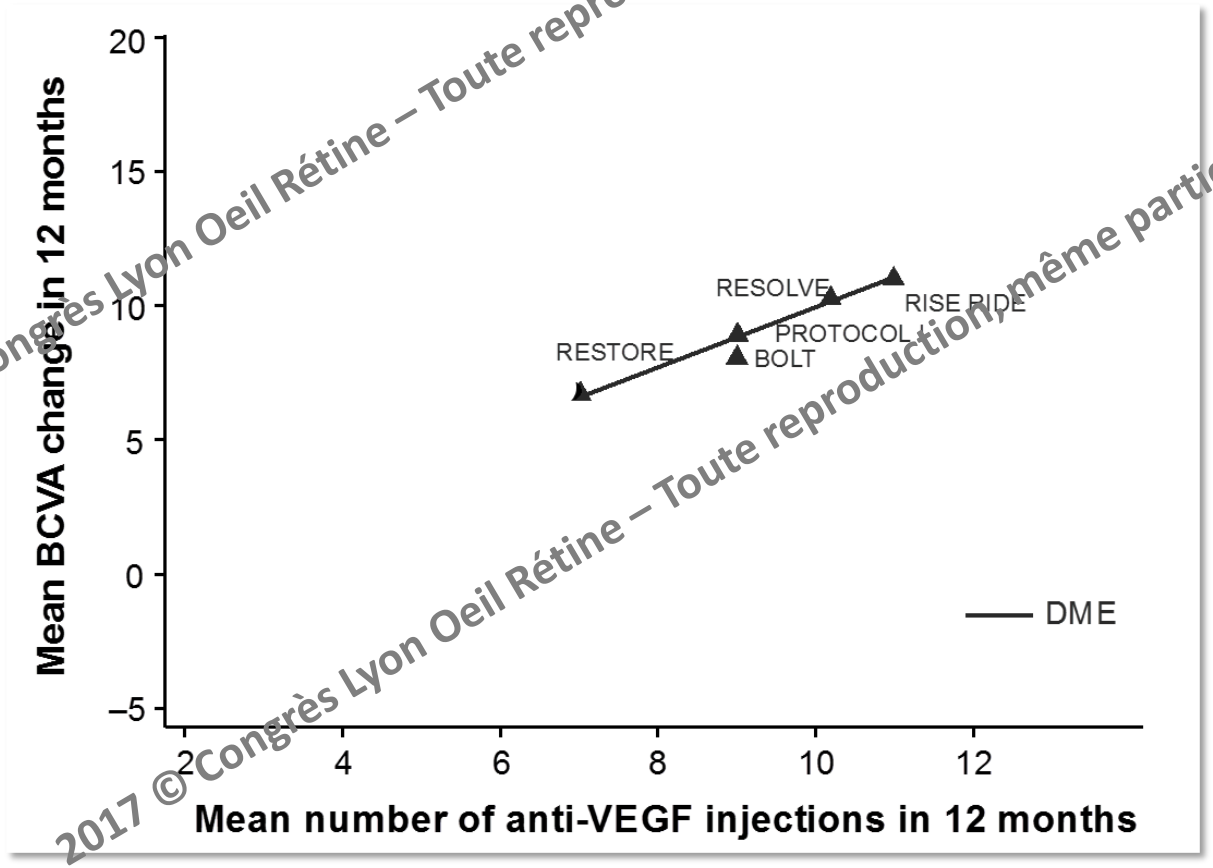
Interventional studies of DME with anti-VEGF until 2014

Ranibizumab & Aflibercept : **good results of pivotal studies but with the necessity of repeated injections (8 to 11 IVI the 1st year)**



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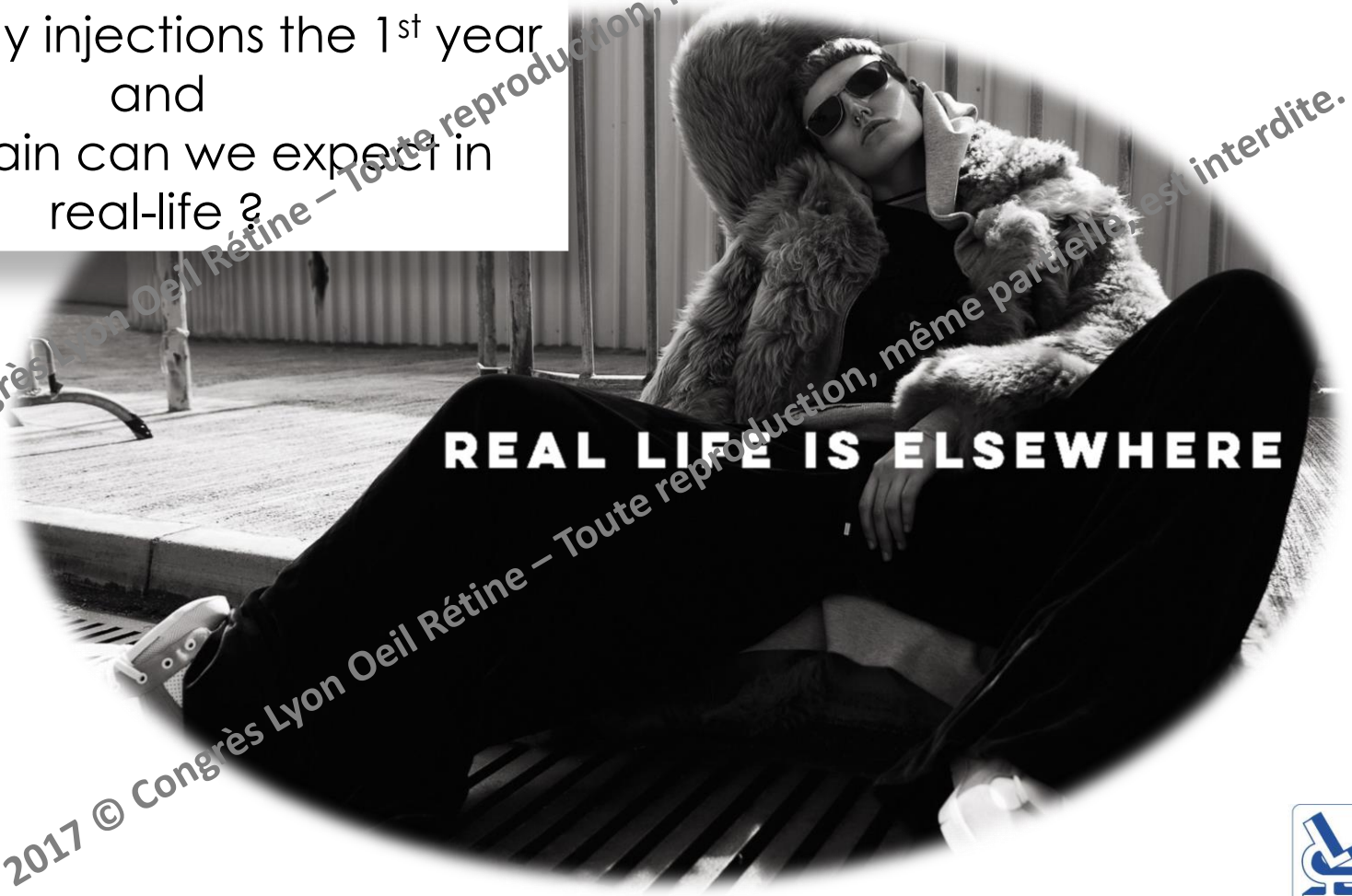
Kiss et al. Clinical Ophthalmology 2014:8 1611–1621

What about treatment regimen and outcomes in real life with anti-VEGF ?

How many injections the 1st year
and
what gain can we expect in real-life ?



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Diabetic Macular Edema Diagnosis and Treatment in the Real World: An Analysis of Medicare Claims Data (2008 to 2010)

Pravin U. Dugel, MD; Andrew Layton, BA; Rohit Varma, MD, MPH

[*Ophthalmic Surg Lasers Imaging Retina.* 2016;47:258-267.]

Patients without anti-VEGF treatment for DME 1 year prior to first anti-VEGF treatment in 2008-2010 N = 772		
2008 n = 101	2009 n = 249	2010 n = 422

- Retrospective « Medicare » study of naïve DME patients treated with anti-VEGF
- **Mean number of IVI: 4.2** (3.1 to 4.6)
- 19% had additional triamcinolone IVI, 34% additional laser
- 65% of patients stopped anti-VEGF during the 1st year of treatment

TABLE 3
DME Treatment Frequency Based on Number of Claims per Patient

	Patients, n	Claims, n	Patients With Claim Submitted, n	Mean Claims Per Patient With Service
Services for DME	772	6,654	100	8.6
Anti-VEGF Treatment for DME[a]	772	3,220	100	4.2
IVTA Treatment for DME[a]	149	363	19	2.4
Focal Laser Services for DME	260	611	34	2.4

* IVTA is not indicated for DME treatment

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PLOS ONE | DOI:10.1371/journal.pone.0149450 February 24, 2016

RESEARCH ARTICLE

Trends in the Care of Diabetic Macular Edema: Analysis of a National Cohort

Brian L. VanderBeek[1,2,3]*, Neepa Shah[1], Purak C. Parikh[1], Livuan Ma[3]

Design

Retrospective cohort study.

2 years of follow-up

Methods

Setting: Administrative medical claims data from a large, national U.S. insurer. Study population: Beneficiaries of a U.S. insurance company. Observation procedures: All incident

Results

Two-year cohorts had 233, 251 and 756 patients in 2002/3, 2006 and 2010 respectively. One-year cohorts had 1002, 1119 and 1382 patients in 2009, 2010 and 2011, respectively. Both percentage of patients receiving therapy and number of treatments given increased across the 2-year cohorts for both focal laser and anti-vascular endothelial growth factor (anti-VEGF) (p<0.001). The highest use of anti-VEGF agents in any of the cohorts was in the 2011 1-year group that only averaged 3.78 injections. Focal laser was used 2.5x as frequently as anti-VEGF injections in the most recent cohorts with only a high of 14.0% of DME patients receiving anti-VEGF therapy in any of the cohorts.

Conclusion

Regardless of treatment modality (laser or injection) DME patients received vastly fewer treatments than patients in randomized control trials. Despite the proven superior visual

Table 3. 2-year cohort data on treatment types and frequencies.

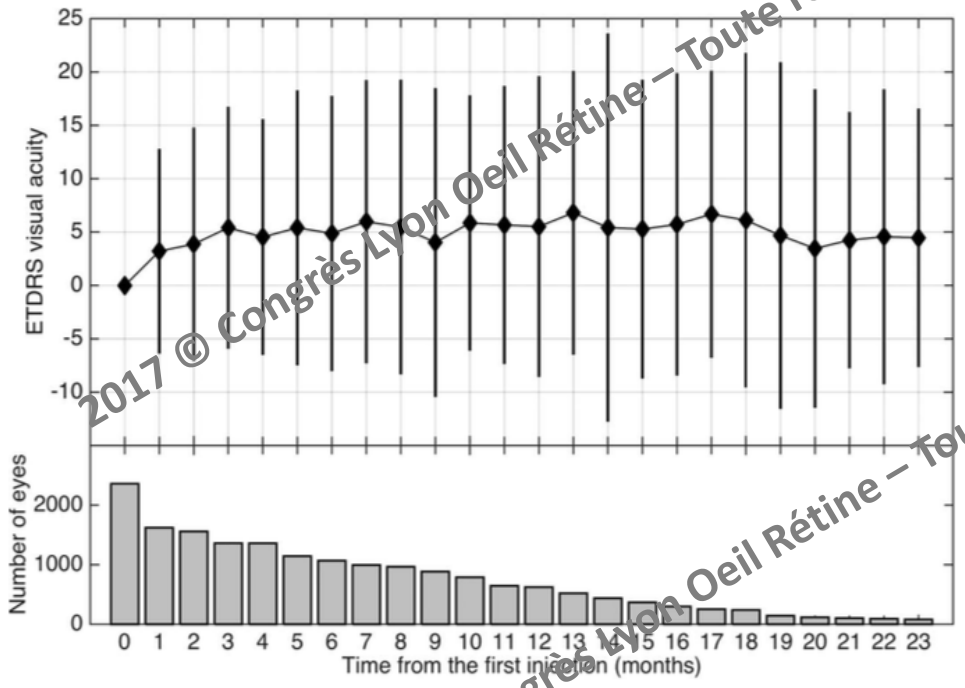
	2002/3-2005	2006–8	2010–12	p-value
Patients (PT)	233	251	756	
Total Office Visits	787	838	2853	
		Focal Laser Treatments		
% PT w/ focal laser (N)	22.75% (53)	35.06% (88)	36.64% (277)	***<0.001***
Total focal lasers performed	68	158	552	
Range of focals performed	0–4	0–10	0–10	
# Focals/focal PT (SD)	1.28 (0.63)	1.80 (1.39)	1.99 (1.44)	***<0.001***
# Focals/total visits (SD)	8.64% (0.28)	18.85% (0.39)	19.34% (0.40)	***<0.001***
		Anti-VEGF Treatments		
% PT w/ Anti-VEGF (N)	0% (0)	2.00% (5)	14.55% (110)	***<0.001***
Total Anti-VEGF injections	0	10	430	
Range of injections performed	0	0–3	0–15	
# Injections/anti-VEGF PT (SD)	0 (NA)	2.00 (1.00)	3.91 (3.21)	0.19
# Injections/total visits (SD)	0 (NA)	1.19% (0.11)	15.07% (0.36)	***<0.001***
		Steroid Injections		
% PT w/ steroid (N)	0% (0)	1.20% (3)	2.38% (18)	***0.04***
Total steroid injections	0	3	31	
Range of injections performed	0	0–1	0–5	
# Injections/steroid PT (SD)	0 (NA)	1 (0.00)	1.72 (1.18)	0.31
# Injections/total visits (SD)	0 (NA)	0.36% (0.06)	1.09% (0.10)	***0.003***
		Any Treatment		
% PT with any treatment (N)	22.75% (53)	35.86% (90)	40.48% (306)	***<0.001***

doi:10.1371/journal.pone.0149450.t003

LONG TERM EFFICACY OF ANTI-VEGF: 2 YEARS

The United Kingdom Diabetic Retinopathy Electronic Medical Record Users Group, Report 1: baseline characteristics and visual acuity outcomes in eyes treated with intravitreal injections of ranibizumab for diabetic macular oedema

Egan C, et al. Br J Ophthalmol 2017;101:75–80



19 UK centres
Data from 12989 clinic visits about 3103 DME eyes

Follow-up of 2 years
Mean visual gain : 5 letters
Mean of 3.3 injections the 1st year

For the eyes followed at least 2 years
Baseline VA: 51.1 (SD 19.3) letters
1-year VA: 54.2 (SD 18.6) letters
2-year VA: 52.5 (SD 19.4) letters

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OPEN ACCESS

Five-year visual acuity outcomes and injection patterns in patients with pro-re-nata treatments for AMD, DME, RVO and myopic CNV

Thomas Wecker, Christoph Ehlken, Anima Bühler, Clemens Lange, Hansjürgen Agostini, Daniel Böhringer, Andreas Stahl

BJO 2016

Diagnosis	n (year 1)	n (year 2)	n (year 3)	n (year 4)	n (year 5)
AMD	1661	1080	644	341	121
DME	479	285	143	67	13

ABSTRACT

Background Anti vascular endothelial growth factor (VEGF) therapy is an established treatment for various retinal diseases. Long-term data on injection frequencies and visual acuity (VA), however, are still rare.

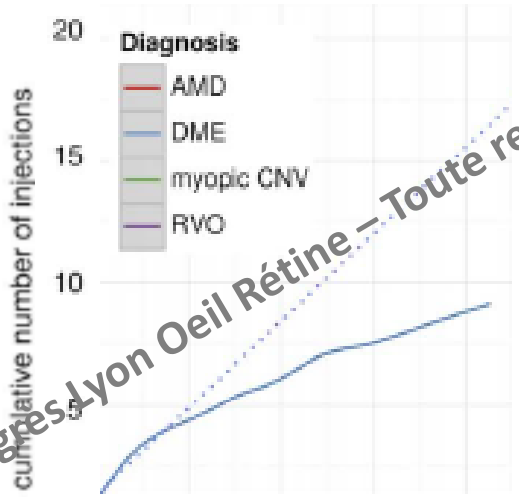
Methods Five-year analysis of real-life VA developments and injection patterns from 2072 patients (2577 eyes; 33 187 injections) with chronically active disease undergoing pro-re-nata treatment for age-related macular degeneration (AMD), diabetic macular oedema (DME), retinal vein occlusion (RVO) and myopic choroidal neovascularisation (CNV).

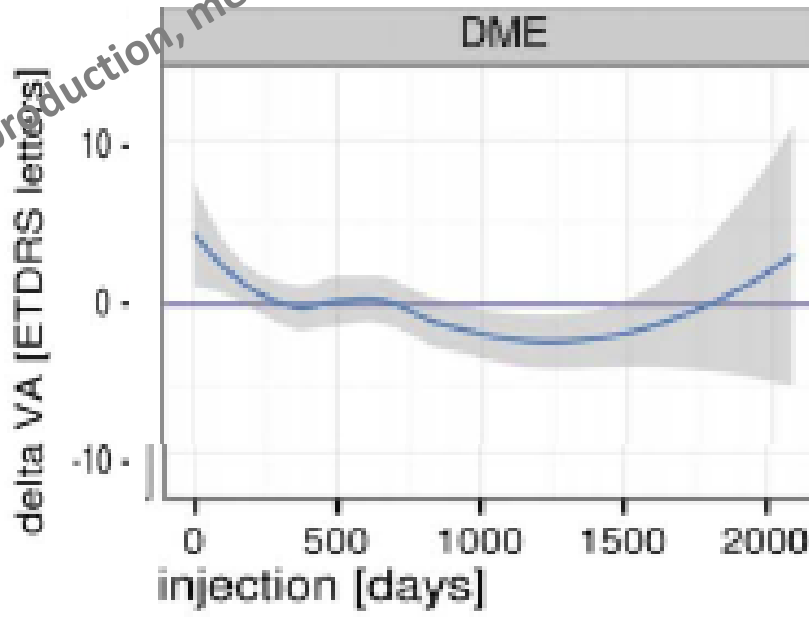
Results Maximum mean VA gain in year 1 was +9.2 letters in AMD, +6.2 in DME, +10 in RVO and +7.2 in myopic CNV. Over 5 years, however, VA in patients with AMD declined. By year 5, 34% of patients with AMD had experienced VA loss of >15 letters, 56% had remained stable and 10% had gained >15 letters. Long-term VA developments in DME and RVO were more favourable with 81% of DME and 79% of patients with RVO gaining or maintaining vision at 5 years. In AMD, median injection frequency was six in year 1 and between four and five in consecutive years. In DME and RVO, median injection frequency was six in year 1 but lower compared with AMD in consecutive years. Injection frequency in DME was weakly associated with patient age (r_s=0.1; p=0.03).

Conclusions In AMD, the initial VA gain was not maintained long term despite higher injection numbers compared with DME, RVO and myopic CNV. The presented real-world data provide a peer group-based estimate of VA developments and injection frequencies for counselling patients undergoing long-term anti-VEGF therapy.

Retrospective study sponsored by Novartis
PRN treatment regimen, 1,634 eyes

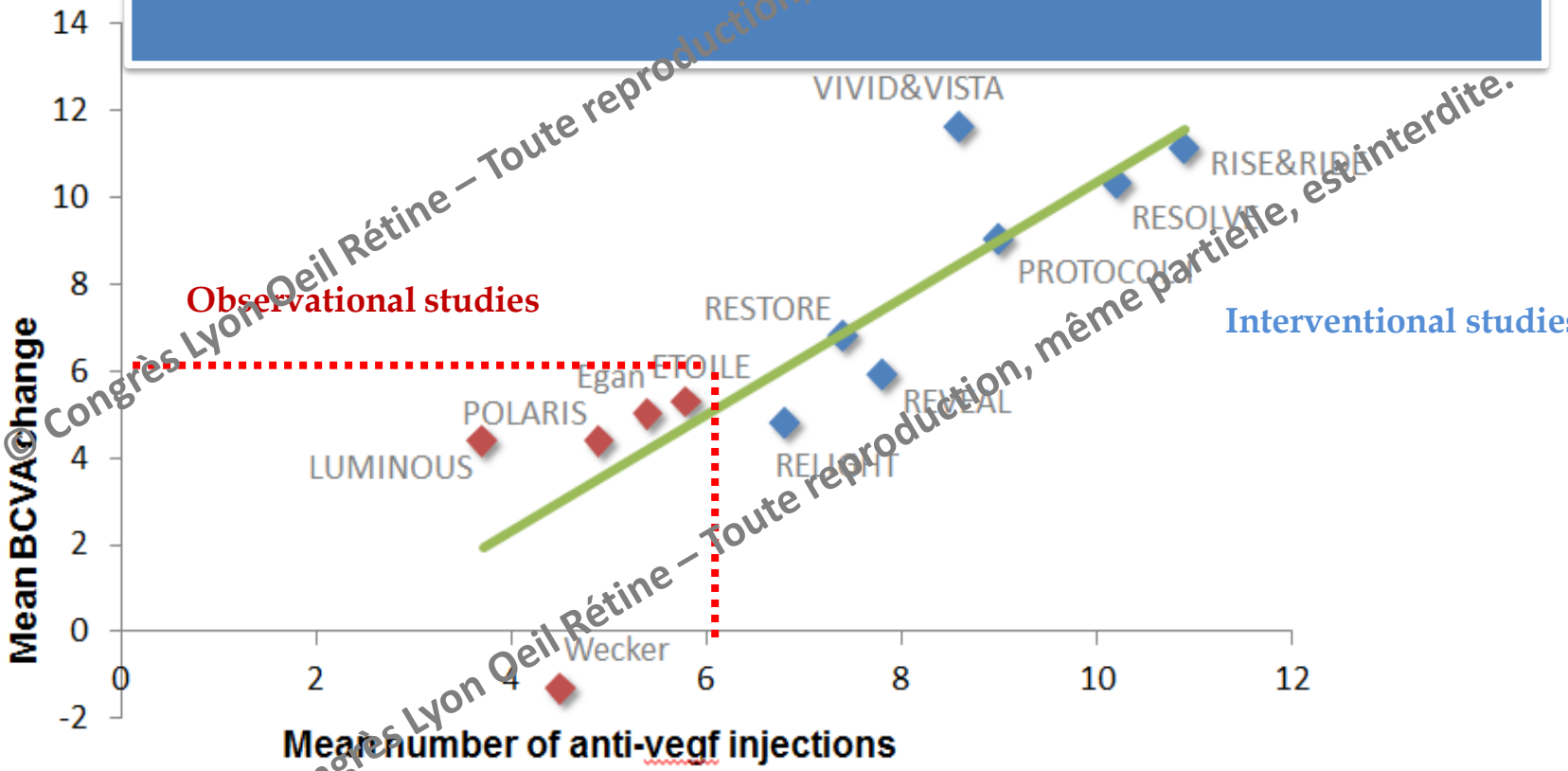
DME:
- Maximum gain during the 1st year = +6.2 letters
- Fewer than 5 injections on average, median of 6 in 1st year
- **At 1 year, gain of -1.3 letters - At 5 years, gain of 0 letter**





Interventional vs Observational studies of DME with anti-VEGF until today

DME : 1 injection means 1 letter gain (the 1st year)



Kodjikian et al. In submission

In real life, anti-VEGF injections & gain are **below 6 injections and 6 letters**
→ Persistence of DME

ANTI-VEGF en vraie vie dans l'OMD

- Le véritable inconvénient des anti-VEGF : **pas assez d'injections** pour reproduire les bons résultats des études pivotales/interventionnelles

- Donc bien réfléchir **au schéma de traitement** à adopter
- Or ces schémas ne sont pas tous équivalents
  - car pour une efficacité à peu près équivalente
  - ils diffèrent pour le nombre d'IVT et le nombre de visites
  - La 1ère année : contraignante (surtout les 6 premiers mois) : 8 à 9 IVT nécessaires en moyenne pour maximiser le gain d'AV
  - Ensuite, moins contraignant avec une diminution du nombre des IVT, sans perte d'efficacité

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Études interventionnelles avec OZURDEX

Lyon 1

Hôpitaux de Lyon

Est-ce que ozurdex est aussi efficace que les anti-VEGF ?

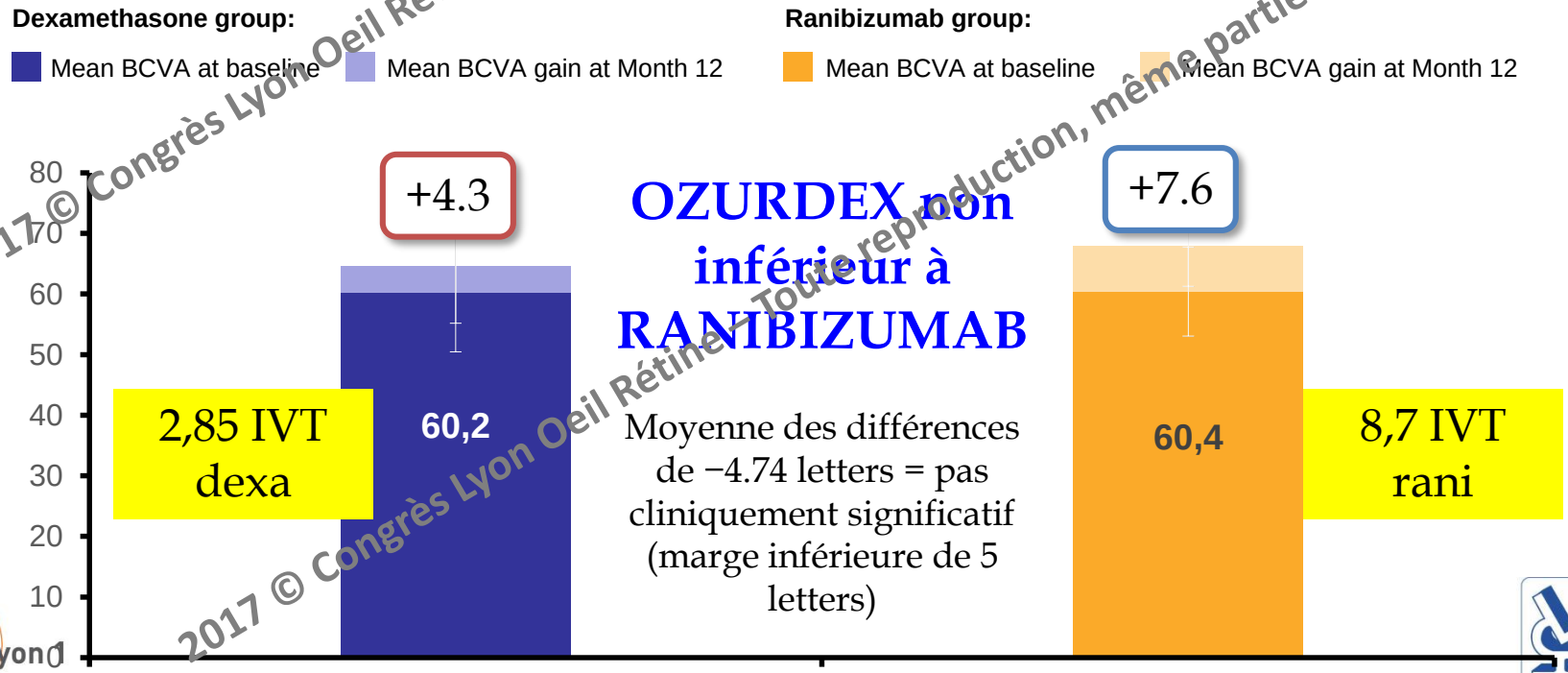
OUI

A multicenter, 12-month randomized study comparing dexamethasone intravitreal implant with ranibizumab in patients with diabetic macular edema

Graefes Arch Clin Exp Ophthalmol 2016

David G. Callanan[1] · Anat Loewenstein[2] · Sunil S. Patel[3] · Pascale Massin[4] · Borja Corcóstegui[5] · Xiao-Yan Li[6] · Jenny Jiao[6] · Yehia Hashad[6] · Scott M. Whitcup[7]

MAGGIORE



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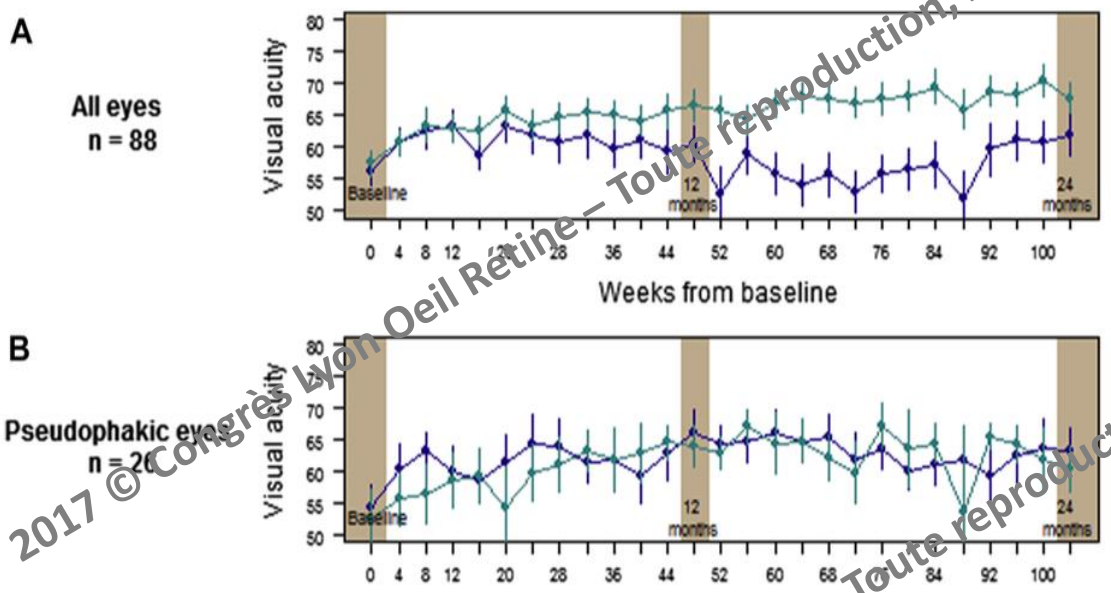
Hôpitaux de Lyon

Est-ce que ozurdex est aussi efficace que les anti-VEGF ?

OUI

BEVORDEX

Ophthalmology *Volume* ■, *Number* ■, *Month 2016*



NON-INFÉRIORITÉ

Mean VA improvement
Beva: 9.6
Dexa : 6.9
p=0.3

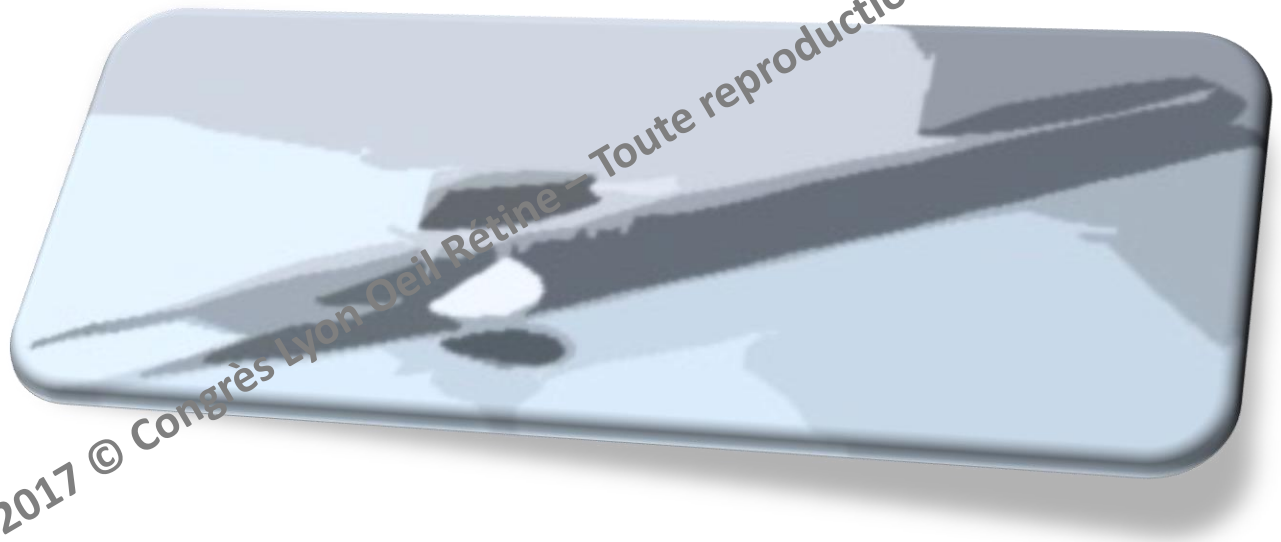
Mean VA improvement
Beva: 7.7
Dexa : 8.9
p=0.77

- Number of injections over 2 years: 5.1 with Dexa versus 14 with Beva
- Dexa may have a stronger effect on resolving hard exudate *(2017)*

Lyon 1

Hôpitaux de Lyon

Que peut-on attendre en vraie vie de l'implant de Dexaméthasone ?



Lyon 1

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REAL-LIFE STUDY IN DIABETIC MACULAR EDEMA TREATED WITH DEXAMETHASONE IMPLANT

The Reldex Study

ARIANE MALCLÈS, MD,* CORINNE DOT, MD, PhD,†‡ NICOLAS VOIRIN, PhD,*
ÉMILIE AGARD, MD,†‡ ANNE-LAURE VIÉ, MD,* DAVID BELLOCQ, MD,* PHILIPPE DENIS, MD, PhD,*
LAURENT KODJIKIAN, MD, PhD*

Purpose: To evaluate the efficacy and safety of intravitreal implant of dexamethasone (Ozurdex) in diabetic macular edema in real-life practice.
Methods: In this bicentric retrospective study, the authors reviewed 128 eyes of 89 patients. Main outcome measures included changes in best-corrected visual acuity, central macular thickness, time to retreatment, and incidence of adverse effects. Linear mixed-effects models were used to study changes in best-corrected visual acuity and central macular thickness over the 3-year follow-up.
Results: Best-corrected visual acuity increased by a mean of 3.6 letters at Month 2 (P = 0.005), 4.2 letters at Month 12 (P = 0.006), 5.3 at Month 24 (P = 0.007), and 9.5 letters at Month 36 (P = 0.023). The proportion of eyes achieving at least a 15-letter improvement from baseline was 25.4% at Month 36. Central macular thickness decreased from 451 μm to 289 μm at Month 2 (P < 0.001), 370 μm at Month 12 (P < 0.001), 377 μm at Month 24 (P = 0.004), and 280 μm at Month 36 (P = 0.001). A mean of 3.6 injections were administered over the 3-year follow-up. Ten percent of eyes developed a transient increase in intraocular pressure (IOP ≥ 25 mmHg), and cataract was removed from 47% of phakic eyes.
Conclusion: This large case series study showed favorable 3-year outcomes when using Ozurdex to treat diabetic macular edema. Intravitreal Ozurdex provides substantial long-term benefits in the treatment of diabetic macular edema in real-life.
RETINA 37:753–760, 2017

SAFETY OF INTRAVITREAL DEXAMETHASONE IMPLANT (OZURDEX)

The SAFODEX study. Incidence and Risk Factors of Ocular Hypertension

ARIANE MALCLÈS, MD,* CORINNE DOT, MD, PhD,†‡ NICOLAS VOIRIN, PhD,*
ANNE-LAURE VIÉ, MD,* ÉMILIE AGARD, MD,†‡ DAVID BELLOCQ, MD,* PHILIPPE DENIS, MD, PhD,*
LAURENT KODJIKIAN, MD, PhD*

Purpose: To analyze the incidence, risk factors, and time course of intraocular pressure elevation after intravitreal dexamethasone implant (Ozurdex).
Methods: The medical charts of 421 consecutive eyes (361 patients) receiving one or more Ozurdex implant between October 2010 and February 2015 were reviewed retrospectively. Ocular hypertension was defined as intraocular pressure of at least 25 mmHg or an increase of at least 10 mmHg from baseline. The main indications for treatment were retinal vein occlusion (34%), diabetic macular edema (30%), postsurgical macular edema (17%), uveitis (14%), and other etiologies (5%).
Results: Among 1,000 intravitreal injections, ocular hypertension was recorded for 28.5% of injected eyes over a mean follow-up period of 16.8 months (3–55). Intraocular pressure-lowering medication was required for 31% of eyes. Only three eyes with preexisting glaucoma required filtering surgery to manage postinjection intraocular pressure elevation. Early retreatment between the third and fourth month does not increase the risk of intraocular pressure elevation. Younger age, male sex, Type 1 diabetes, preexisting glaucoma treated with dual or triple therapy, and a history of retinal vein occlusion or uveitis were significant risk factors for ocular hypertension after dexamethasone implant injection (P < 0.05 for all the above).
Conclusion: Episodes of ocular hypertension after Ozurdex implant were generally transient and successfully managed with topical treatment. An analysis of the risk factors may help to determine the risk–benefit ratio for individual patients treated with dexamethasone implants.
RETINA 37:1352–1359, 2017

TOLERANCE OF INTRAVITREAL DEXAMETHASONE IMPLANTS IN PATIENTS WITH OCULAR HYPERTENSION OR OPEN-ANGLE GLAUCOMA

ANNE-LAURE VIÉ, MD,* LAURENT KODJIKIAN, MD, PhD,* ARIANE MALCLÈS, MD,†
EMILIE AGARD, MD,† NICOLAS VOIRIN, PhD,‡ HUSSAM EL OUEHLAB, MD,†
ANH-MINH NGUYEN, MD,* CORINNE DOT, MD, PhD†

Purpose: Evaluate the pressure tolerance of dexamethasone implants in open-angle glaucoma (OAG+) patients and ocular hypertension (OHT+) patients compared with non-glaucomatous and nonhypertensive patients.
Methods: Retrospective observational 2-center, controlled study including 100 patients treated with intravitreal injections of dexamethasone, divided into 2 groups: Group 1, OAG+/OHT+ (n = 50) and Group 2, OAG−/OHT− (n = 50), matched for age and disease. Intraocular pressure (IOP) and hypotensive treatment were evaluated initially, at 8 days, and every month for 6 months after intravitreal treatment. The primary endpoint was IOP increase greater than 10 mmHg.
Results: Thirty-four percent of glaucomatous patients experienced a transient IOP increase greater than 10 mmHg versus 16% in the OAG−/OHT− group (P = 0.06). Intraocular pressure greater than 25 mmHg was recorded early on Day 8 in 6% of the OAG+ patients versus 2% of the OAG− patients. Fifty-four percent of the glaucoma patients increased their treatment, and hypotensive treatment was initiated in 38% of the OAG− patients (P = 0.1). Filtering surgery was only required in the OAG+/OHT+ group (6% versus 0%), particularly in dual-therapy and triple-therapy patients, who had a higher risk of filtering surgery (P = 0.008).
Conclusion: Half of the OAG+ and OHT+ patients needed an add-on treatment, with early onset beginning on Day 8 in 6%. This emphasizes the need for IOP monitoring during treatment, especially for OAG+/OHT+ patients.
RETINA 37:173–178, 2017

The PREDIAMEX Study: Pattern of REcurrence in Diabetic Macular Edema treated by deXamethasone implant
Bellocq, Kodjikian et al
Accepted in **Ophthalmology Retina** 2017

Intraocular Dexamethasone Implant Position *in situ* and Ocular Hypertension
Sudhalkar, Kodjikian et al
Accepted in **Retina** 2017

Graefes Arch Clin Exp Ophthalmol
DOI 10.1007/s00417-017-3773-z

LETTER TO THE EDITOR

DEX implant intravitreal injection, sustained intraocular hypertension, and steroid-induced glaucoma in patients with no risk factors

Rezkallah Amina[1] · Kodjikian Laurent[1] · Malclès Ariane[1] · Dot Corinne[2,3]

Graefes Arch Clin Exp Ophthalmol (2017) 255:1369–1374
DOI 10.1007/s00417-017-3660-7

RETINAL DISORDERS

Intravitreal dexamethasone implant for recalcitrant cystoid macular edema secondary to retinitis pigmentosa: a pilot study

Aditya Sudhalkar[1] · Laurent Kodjikian[2] · Nishikant Borse[1]

JOURNAL OF OCULAR PHARMACOLOGY AND THERAPEUTICS
Volume 33, Number 8, 2017
© Mary Ann Liebert, Inc.
DOI: 10.1089/jop.2017.0020

ORIGINAL ARTICLE

Long-Term Intravitreal Dexamethasone Treatment in Eyes with Pretreated Chronic Diabetic Macular Edema

Sofia Landi,[1] Théo Lereuil,[2] Florentina Freiberg,[3] Maximilian Pfau,[3] Isabel B. Pfister,[1,4] Steffen Gerhardt,[1,4] Stephan Michels,[3,5] Laurent Kodjikian,[2] and Justus G. Garweg[1,4]

Graefes Arch Clin Exp Ophthalmol
DOI 10.1007/s00417-016-3394-y

RETINAL DISORDERS

Two-year, prospective, multicenter study of the use of dexamethasone intravitreal implant for treatment of macular edema secondary to retinal vein occlusion in the clinical setting in France

Jean-François Korobelnik[1,2,3] · Laurent Kodjikian[4] · Cécile Delcourt[2,3] · Vincent Gualino[5] · Richard Leaback[6] · Sybil Pinchinat[7] · Marie-Eve Velard[8]

Eye (2015), 1–7
© 2015 Macmillan Publishers Limited All rights reserved 0950-222X/15
www.nature.com/eye

Anatomical and functional recurrence after dexamethasone intravitreal implants: a 6-month prospective study

V Fortoul, P Denis and L Kodjikian

BJO Online First, published on May 17, 2016 as 10.1136/bjophthalmol-2016-308544
Clinical science

Effectiveness and safety of dexamethasone implants for postsurgical macular oedema including Irvine–Gass syndrome: the EPISODIC-2 study

David Bellocq,[1,2] Vincent Pierre-Kahn,[3] Frédéric Matonti,[4] Carole Burillon,[5] Nicolas Voirin,[6,7] Corinne Dot,[8] Jad Akesbi,[9] Solange Milazzo,[10] Stéphanie Baillif,[11] Vincent Soler,[12] Benjamin Wolff,[13] Claire Scemama,[14] Ariane Malclès,[1,2] Michel Weber,[15] Laurent Kodjikian[1,2]

EJO
ISSN 1120-6721
Eur J Ophthalmol 2017; 00 (00): 000-000
DOI: 10.5301/ejo.5000940

ORIGINAL RESEARCH ARTICLE

Intravitreal dexamethasone implant (Ozurdex®) for exudative retinal detachment after proton beam therapy for choroidal melanoma

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Clinical science

Effectiveness and safety of dexamethasone implants for post-surgical macular oedema including Irvine-Gass syndrome: the EPISODIC study

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ACTA OPHTHALMOLOGICA 2017

Letter to the Editor

Evaluation of efficacy and safety of dexamethasone intravitreal implants before and after vitrectomy in a real-life study

Amina Rezkallah,[1] Ariane Malclès,[1] Corinne Dot,[2,3] Nicolas Voirin,[1] Emilie Agard,[2,3] Anne-Laure Vié,[1] Philippe Denis,[1] Thibaud Mathis[1] and Laurent Kodjikian[1]

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SHORT TERM EFFICACY OF DEX IMPLANT PREDIAMEX STUDY: 6 MONTHS

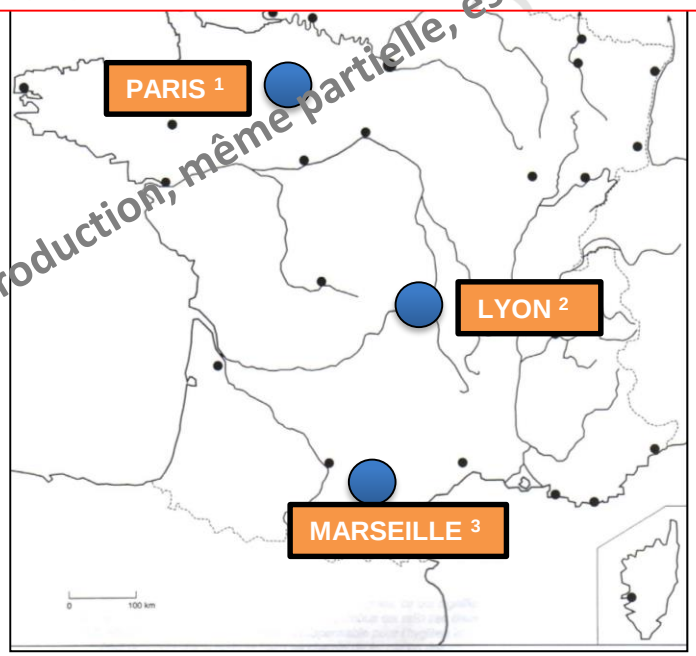
- **Study:**
  - Prospective
    - CPP ethics committee approval 15 February 2015

    1st patient included in June 2015 (IRB 00009118)
  - Observational
  - Multicentric
- **Population:**
  - Ozurdex-naïve patients
  - Presenting with DME
  - No contraindication for Ozurdex

AMERICAN ACADEMY OF OPHTHALMOLOGY

The Pattern of Recurrence in Diabetic Macular Edema Treated by Dexamethasone Implant Study

David Bellocq, MD,[1] Jad Akesbi, MD,[2] Frédéric Matonti, MD, PhD,[3] Christina Vartin, MD,[2] Raphaelle Despreaux,[2] Alban Comet, MD,[3] Nicolas Voirin, PhD,[4] Philippe Denis, MD, PhD,[1] Thibaud Lamis, MD,[1] Laurent Kodjikian, MD, PhD[1]



1: Hôpital des 15/20 Dr Akesbi
2: Hôpital Nord Pr Matonti
3: Hôpital de la Croix-Rousse Pr Kodjikian

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RESULTS: POPULATION BASELINE CHARACTERISTICS N = 37

Previous DME treatment		
Totally naïve	27	**72.9%**
IVT anti-VEGF	10	27.1%
Median time from DME diagnosis to the 1st IVI of Ozurdex	**2.4 months**	
1st Quartile	1.5 months	
3rd Quartile	17.9 months	
Mean baseline BCVA (ETDRS Letters)	58.7 (±17.1)	
Mean baseline CSMT	478.6 (±145.3)	
Mean duration of follow-up (months)	9.4 (6.1-24.4)	
ALL PATIENTS HAD AT LEAST 6 MONTHS OF FOLLOW-UP		
Mean number of IVI per patient	1.5 (1-2)	
Time to reinjection after 1st IVI (months)	4.7 (3.3-6.2)	

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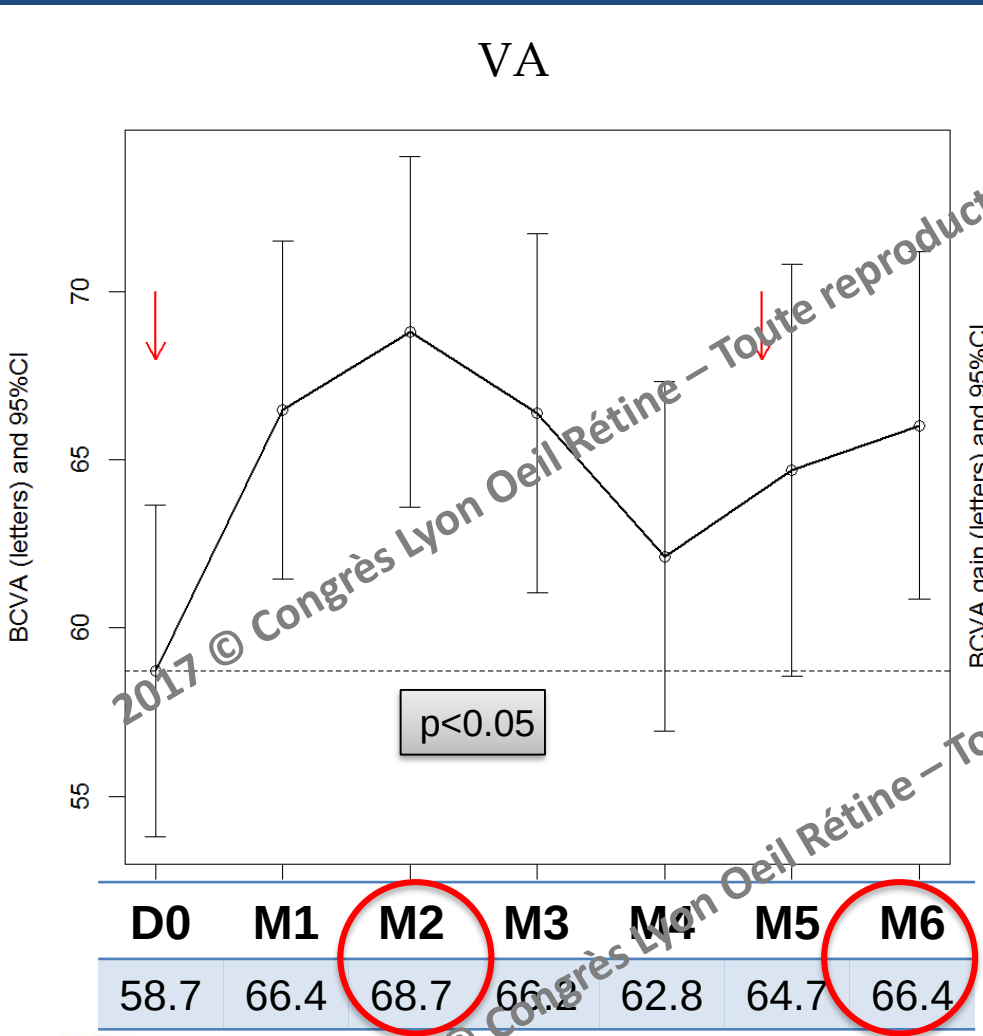
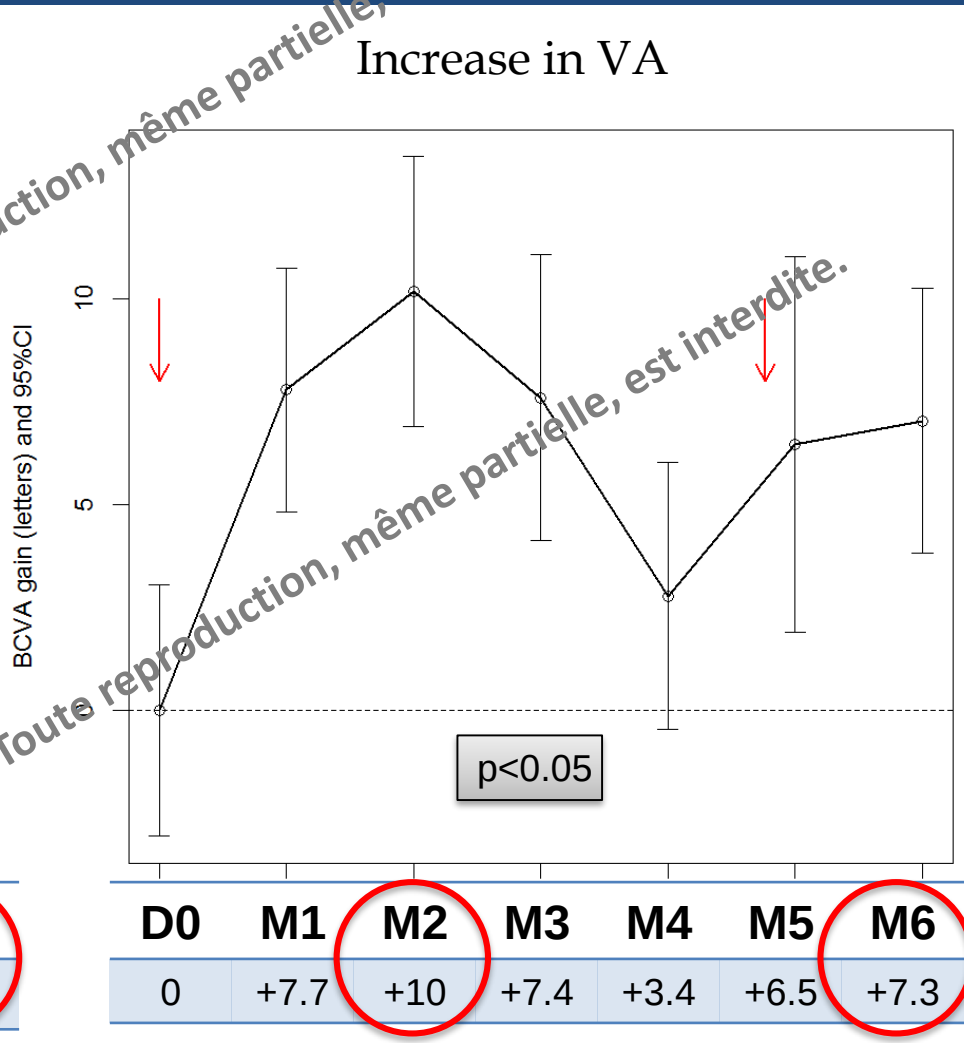
RESULTS: FUNCTIONAL EFFICACY AT 6 MONTHS



D0	M1	M2	M3	M4	M5	M6
58.7	66.4	68.7	66.2	62.8	64.7	66.4



D0	M1	M2	M3	M4	M5	M6
0	+7.7	+10	+7.4	+3.4	+6.5	+7.3

16% (11%) of patients were Functional non-responders (gain < 5 letters)
27% presented VA gain ≥ 15Le

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ORIGINAL RESEARCH ARTICLE

MOZART 2 study

Long-term efficacy and safety of intravitreal dexamethasone implant for the treatment of diabetic macular edema

Frederic Matonti[1-3], Stephan Pommier[3], Franck Meyer[3], Christian Hajjar[3], Pierre Yves Merite[3], Eric Parrat[3], Herve Rouhette[3], Olivier Rebollo[3], Sebastien Guigou[3]

Follow-up of 1 year

ABSTRACT

Purpose: To evaluate the long-term efficacy and safety of the dexamethasone intravitreal implant Ozurdex® in the treatment of diabetic macular edema (DME).

Methods: This was a retrospective noncomparative study. A total of 23 patients with DME followed for at least 12 months were included. All patients were treated with at least 2 Ozurdex® injections for the treatment of DME. Best-corrected visual acuity, central retinal thickness, intraocular pressure (IOP), and cataract progression were recorded over 12 months.

Results: From baseline, the mean decrease in central retinal thickness was 315.9 µm at the 12th month and the mean best-corrected visual acuity improvement from baseline was 8.7 letters. Ozurdex® is administered via the extended release system Novadur®. Its efficacy extends beyond 4 months with a single injection and permits allows good stabilization until the 12th month, with 2.13 injections during this period. An increase in IOP was observed in 13.1% of patients and all were managed using topical IOP-lowering medications. No glaucoma or cataract surgery was necessary and no endophthalmitis was reported.

Conclusions: In real-life clinical practice, Ozurdex® has anatomical and functional effectiveness for the treatment of DME. Side effects were rare and manageable in our practice.

LONG TERM EFFICACY OF OZURDEX – RELDEX STUDY (RETINA 2017): 3 YEARS

REAL-LIFE STUDY IN DIABETIC MACULAR EDEMA TREATED WITH DEXAMETHASONE IMPLANT

The Reldex Study

ARIANE MALCLÈS, MD,* CORINNE DOT, MD, PHD,†‡ NICOLAS VOIRIN, PHD,*
ÉMILIE AGARD, MD,†‡ ANNE-LAURE VIÉ, MD,* DAVID BELLOCQ, MD,* PHILIPPE DENIS, MD, PHD,*
LAURENT KODJIKIAN, MD, PHD*

Purpose: To evaluate the efficacy and safety of intravitreal implant of dexamethasone (Ozurdex) in diabetic macular edema in real-life practice.

Methods: In this bicentric retrospective study, the authors reviewed 128 eyes of 89 patients. Main outcome measures included changes in best-corrected visual acuity, central macular thickness, time to retreatment, and incidence of adverse effects. Linear mixed-effects models were used to study changes in best-corrected visual acuity and central macular thickness over the 3-year follow-up.

Results: Best-corrected visual acuity increased by a mean of 3.6 letters at Month 2 (P =

Conclusion: This large case series study showed favorable 3-year outcomes when using Ozurdex to treat diabetic macular edema. Intravitreal Ozurdex provides substantial long-term benefits in the treatment of diabetic macular edema in real-life.

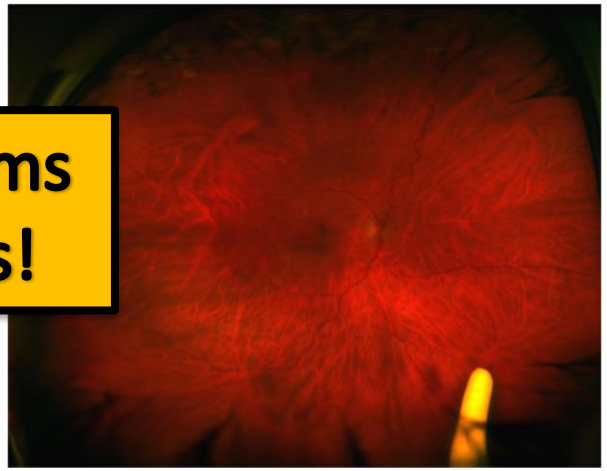
RETINA 37:753–760, 2017

Observational, retrospective, multicentric study
128 DME eyes, including 34 naïve

Follow-up of 3 years
Mean VA gain at 3 years: + 9.5 letters
Gain ≥ 10 letters: 50%

Mean of 3.6 injections over the 3-year follow-up

Reldex (3-year real-life study) confirms Mead (3-year pivotal study) results!



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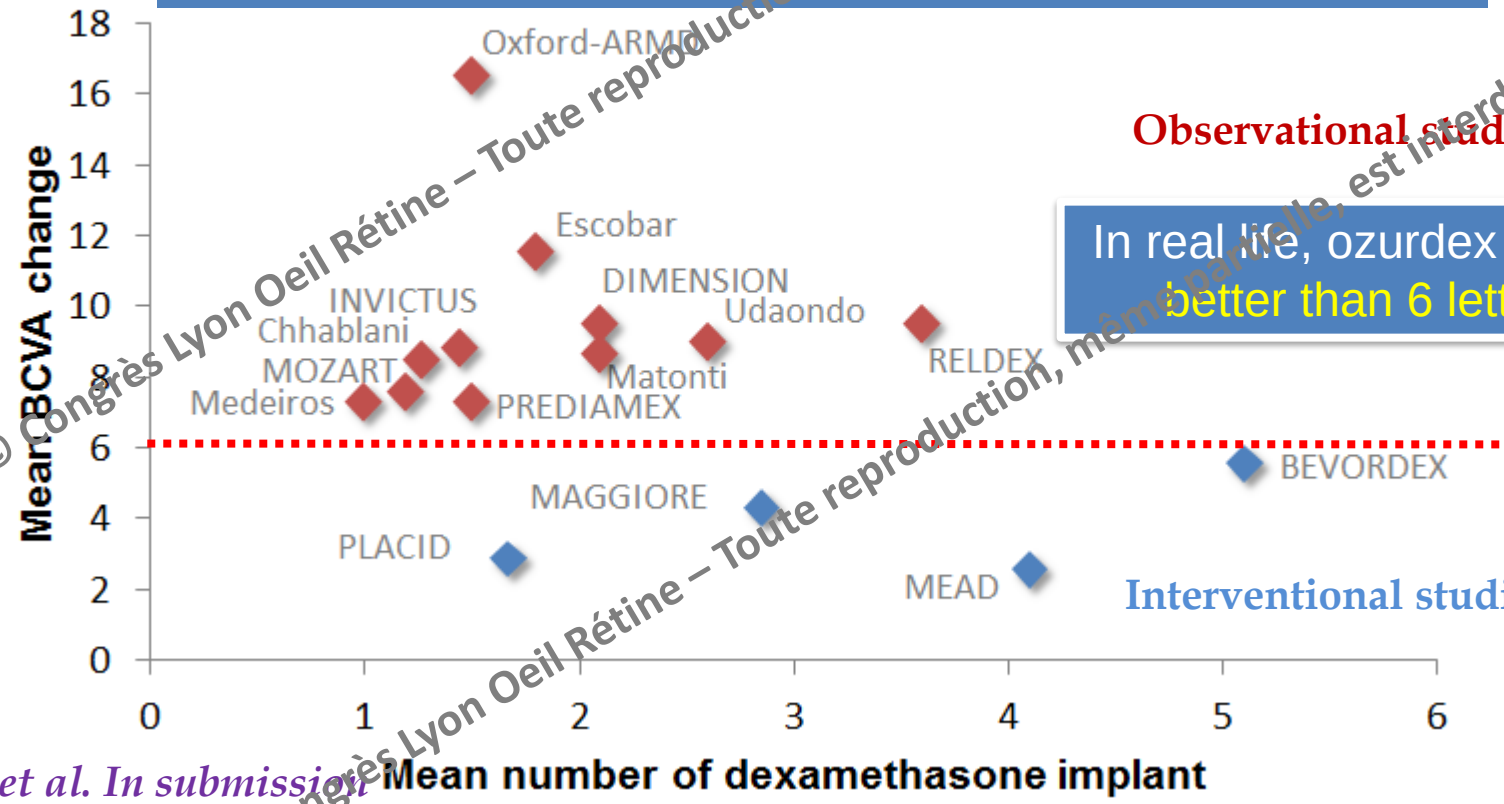
Interventional vs Observational studies of DME with dexamethasone implant until today

The real-life outcomes are comparable if not superior to those of randomized controlled trials



In real life, ozurdex gain is better than 6 letters

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OZURDEX en vraie vie dans l'OMD

- Le véritable avantage de l'Ozurdex : **besoin de moins d'injections** que les anti-VEGF pour une même efficacité

- **Pas de véritable problème de tolérance**

2 à 3 IVT

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CONCLUSION

- **Traitement par anti-VEGF :**
  - Études interventionnelles : résultats excellents
  - Etudes observationnelles (vraie vie) : disponibles pour ranib. seulement, résultats bien moins bons car pas assez IVT
- **Traitement par DEX-implant (OZURDEX) :**
  - Études interventionnelles : résultats non inférieurs aux anti-VEGF
  - Etudes observationnelles (vraie vie) : résultats bien meilleurs car davantage d'IVT **et** supérieurs à ceux actuellement disponibles avec les anti-VEGF (ranibizumab)

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Traiter un OMD :
C'est comme cuisiner !

Il faut de bons ingrédients
(*la molécule*),
une bonne recette
(*un bon schéma*) **…**

mais aussi une facilité d'application
(*afin de reproduire en vraie vie les résultats des études pivotales*)