# Vascularites à ANCA
# Quelle(s) posologie(s) de corticoïdes ?

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CHU Nantes

# Vascularites à ANCA

**Polyangéite**

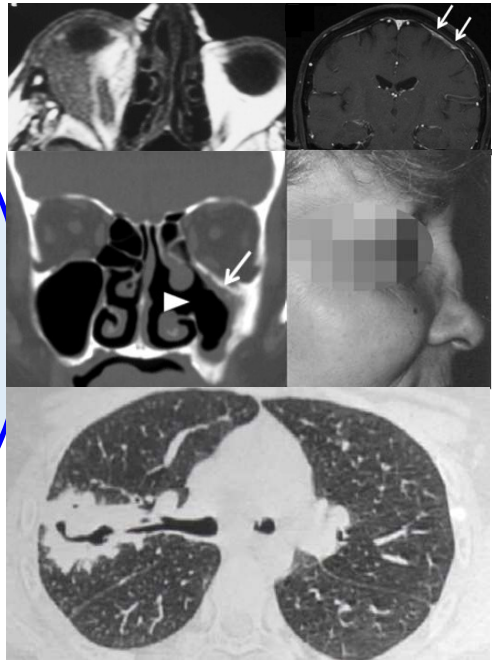
arthromyalgies
purpura
neuropathie

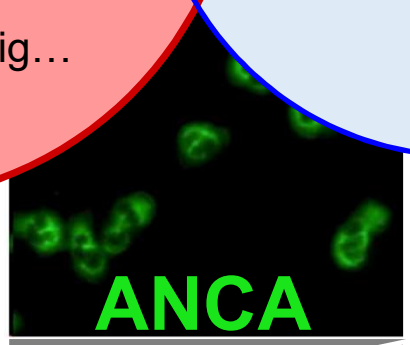
**Hémorragie alvéolaire**
**Glomérulonéphrite N. eCap**

Coeur, SNC, dig…

**Granulomatose**

Rhino-sinusite
Otite
Orbite
Foyer, nodules pulm.
Sténose

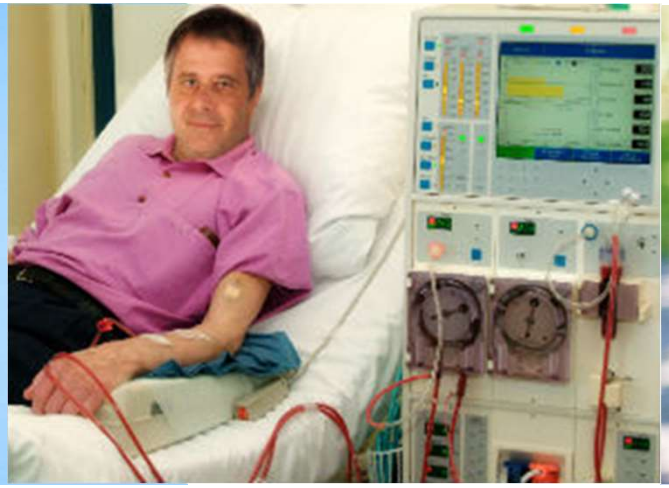
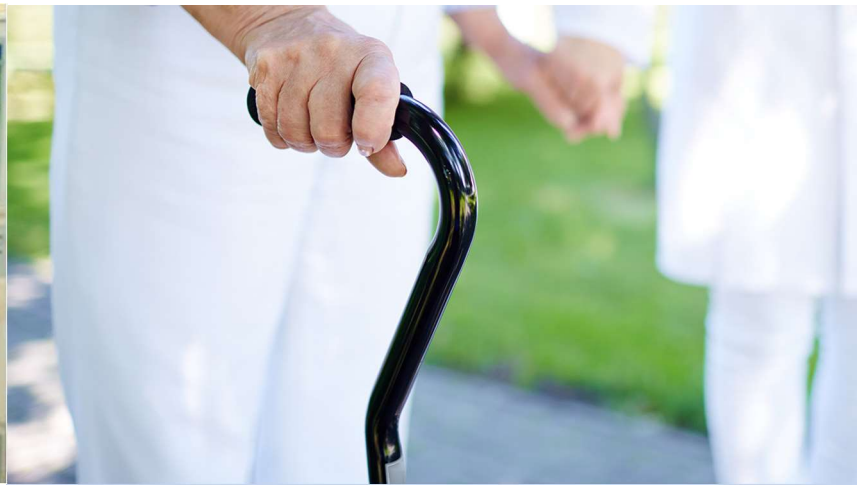





**MPO** **PR3**

# Vascularites à ANCA

# 3 menaces directes


Prednisone
20 mg

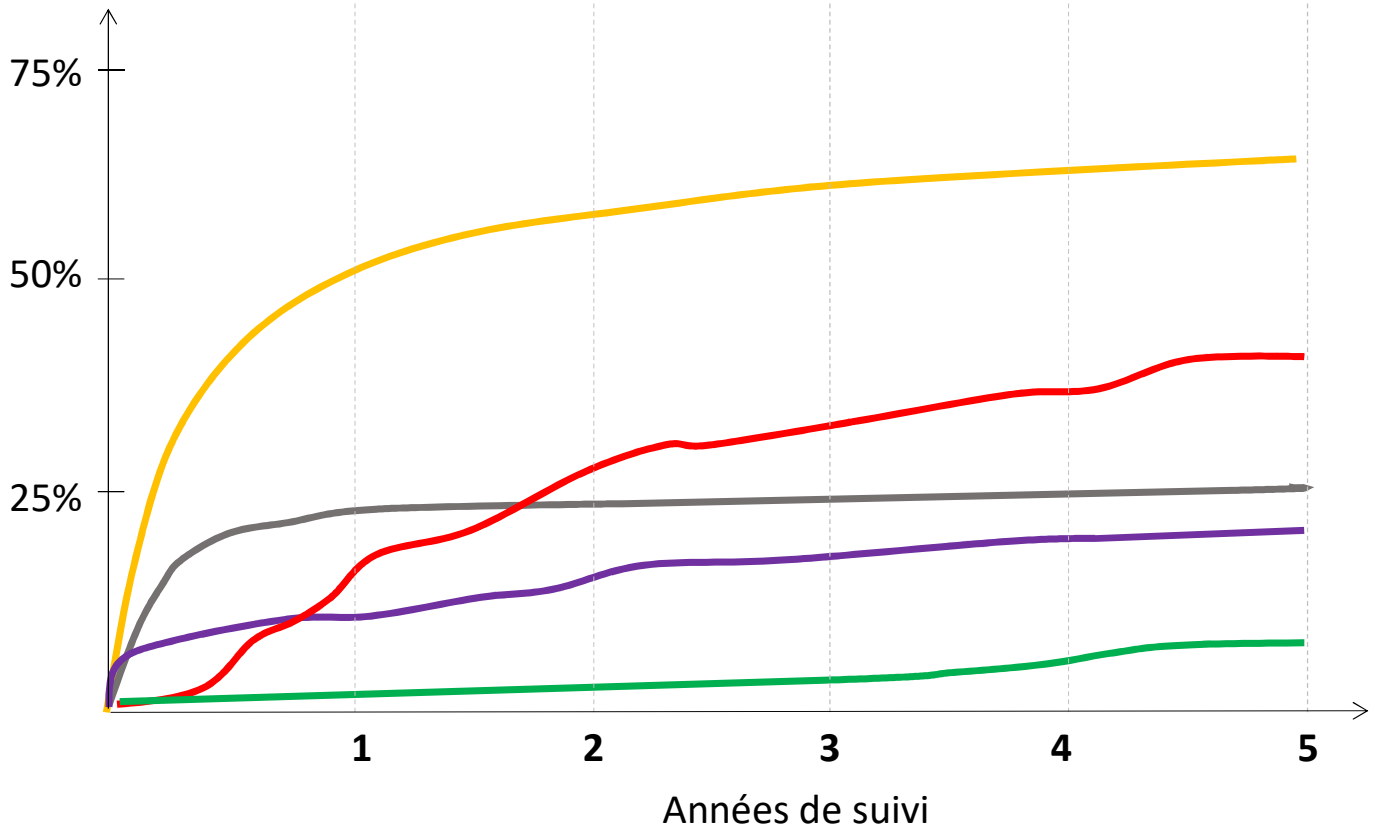

POMPIERS DE PARIS
IVECO


Prednisone
20 mg


HIPPOLYTE
1959 ZG 25

# Vascularites à ANCA et infections

498 V.ANCA
Néphrologique (eGFR médian =19ml/min)




McGregor, et al. *NDT* 2015

# Vascularites à ANCA et infections

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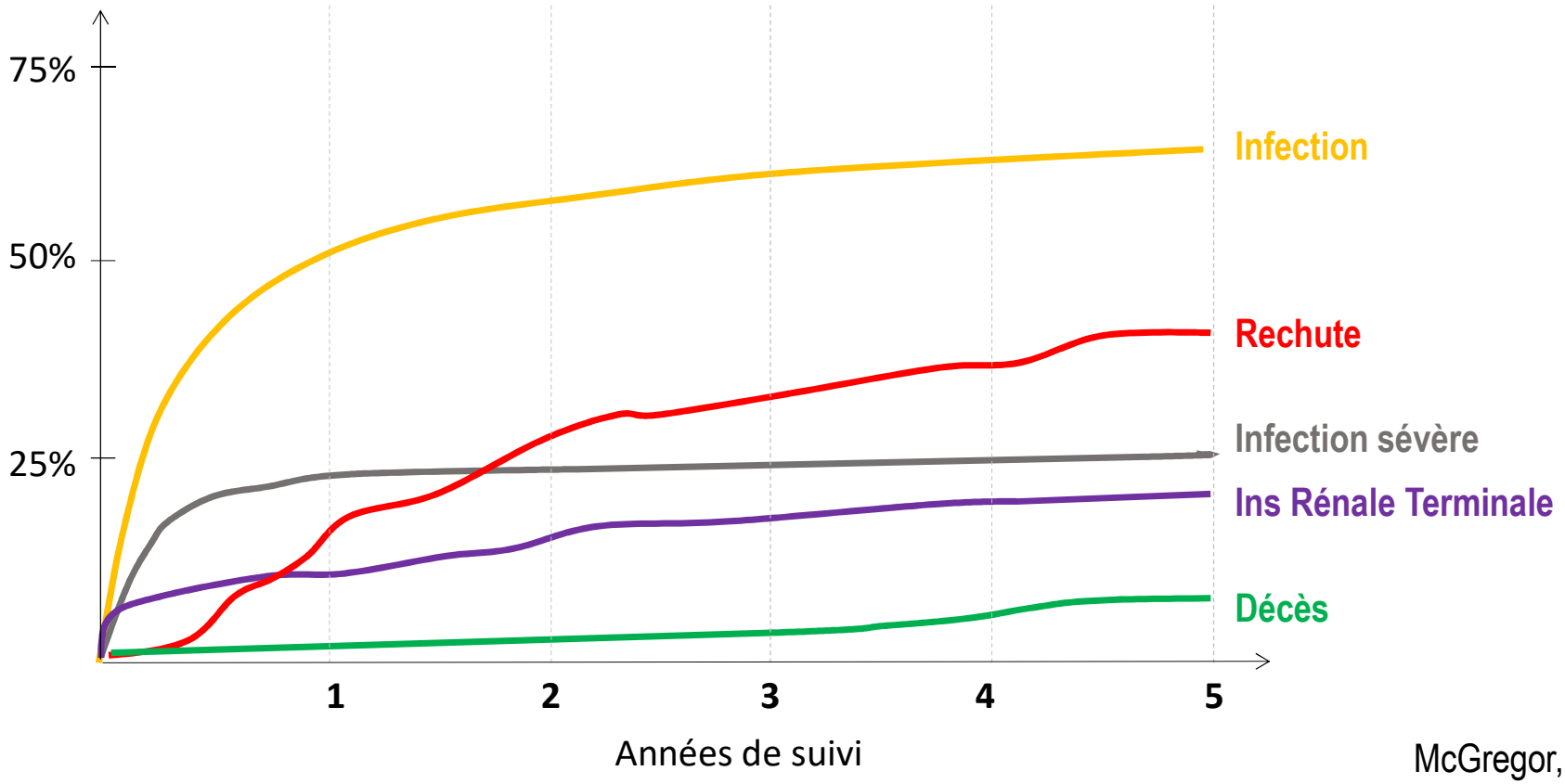
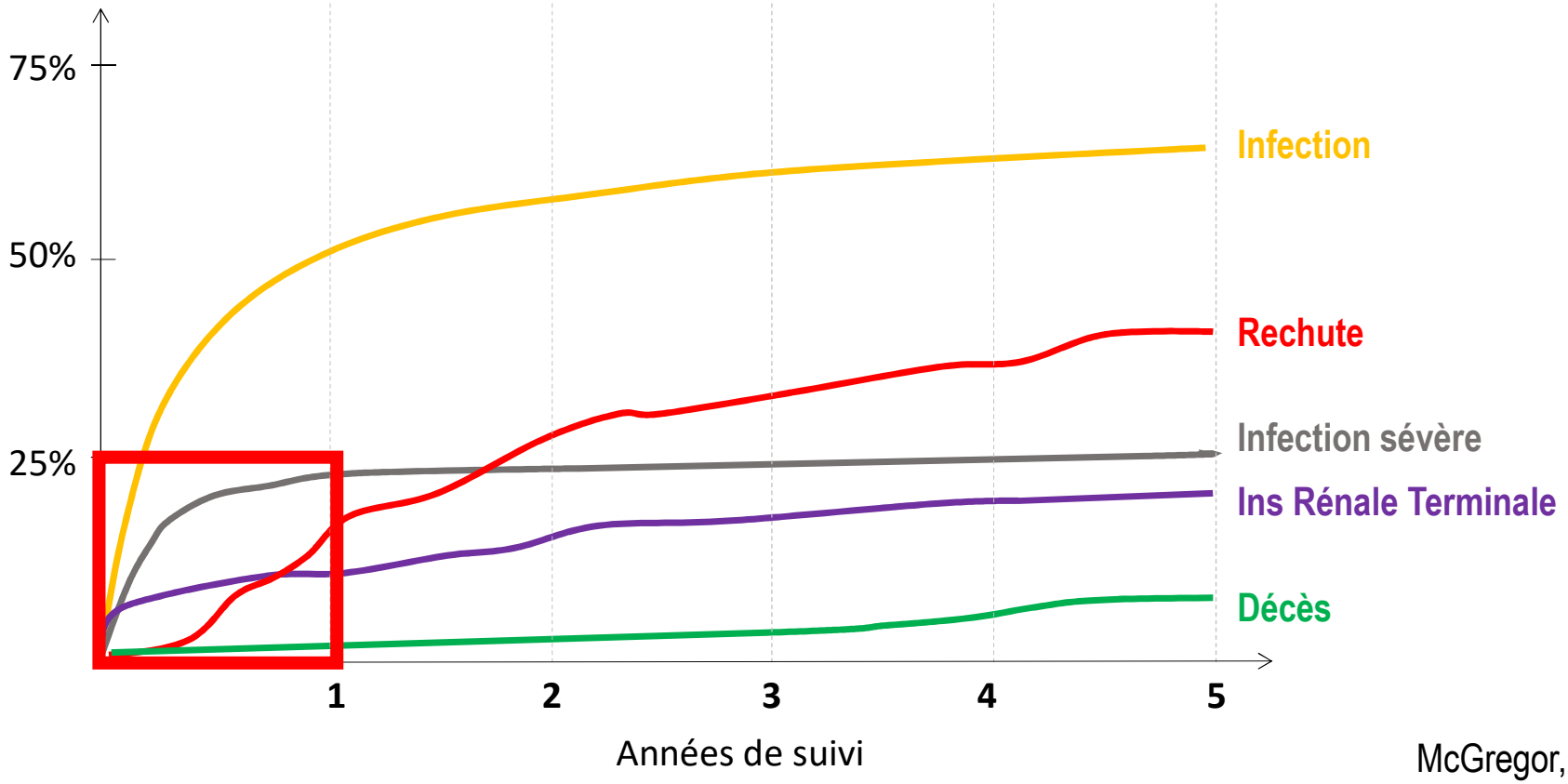
Néphrologique (eGFR médian =19ml/min)




McGregor, et al. *NDT* 2015

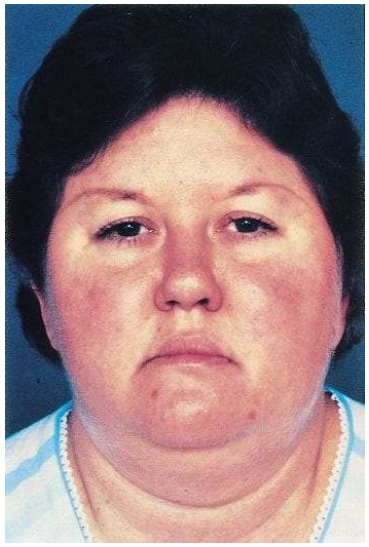
# Vascularites à ANCA et infections

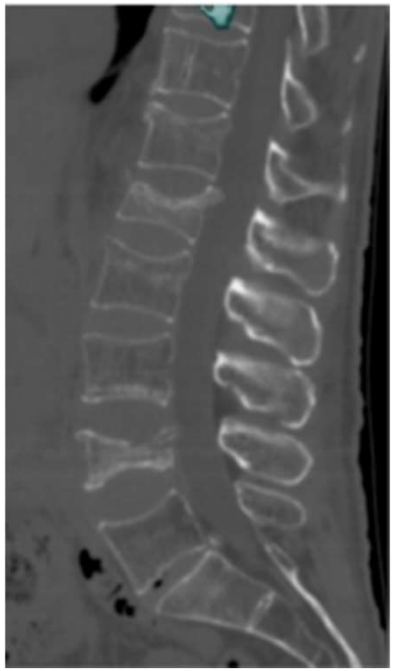
498 V.ANCA
Néphrologique (eGFR médian =19ml/min)

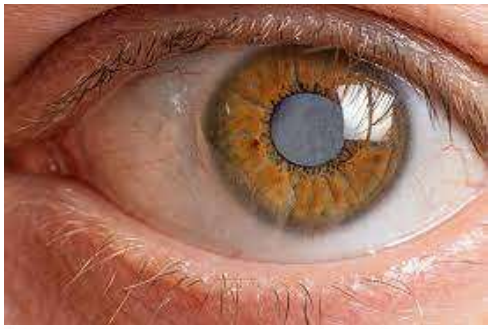


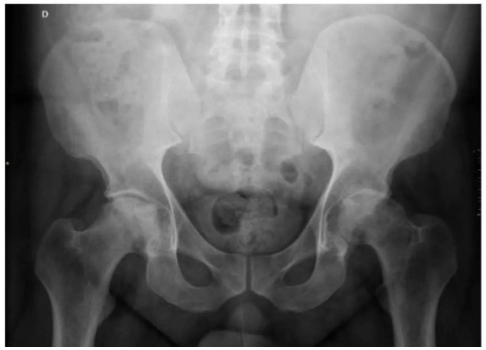

McGregor, et al. *NDT* 2015

# Menaces indirectes







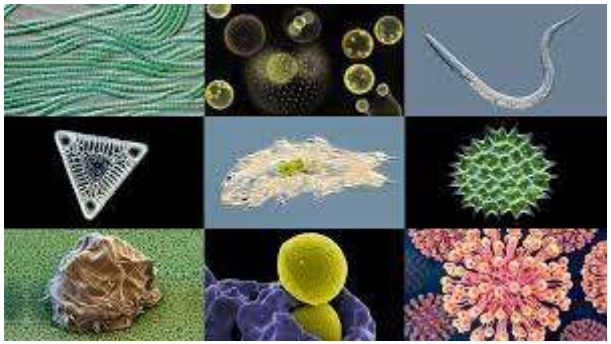
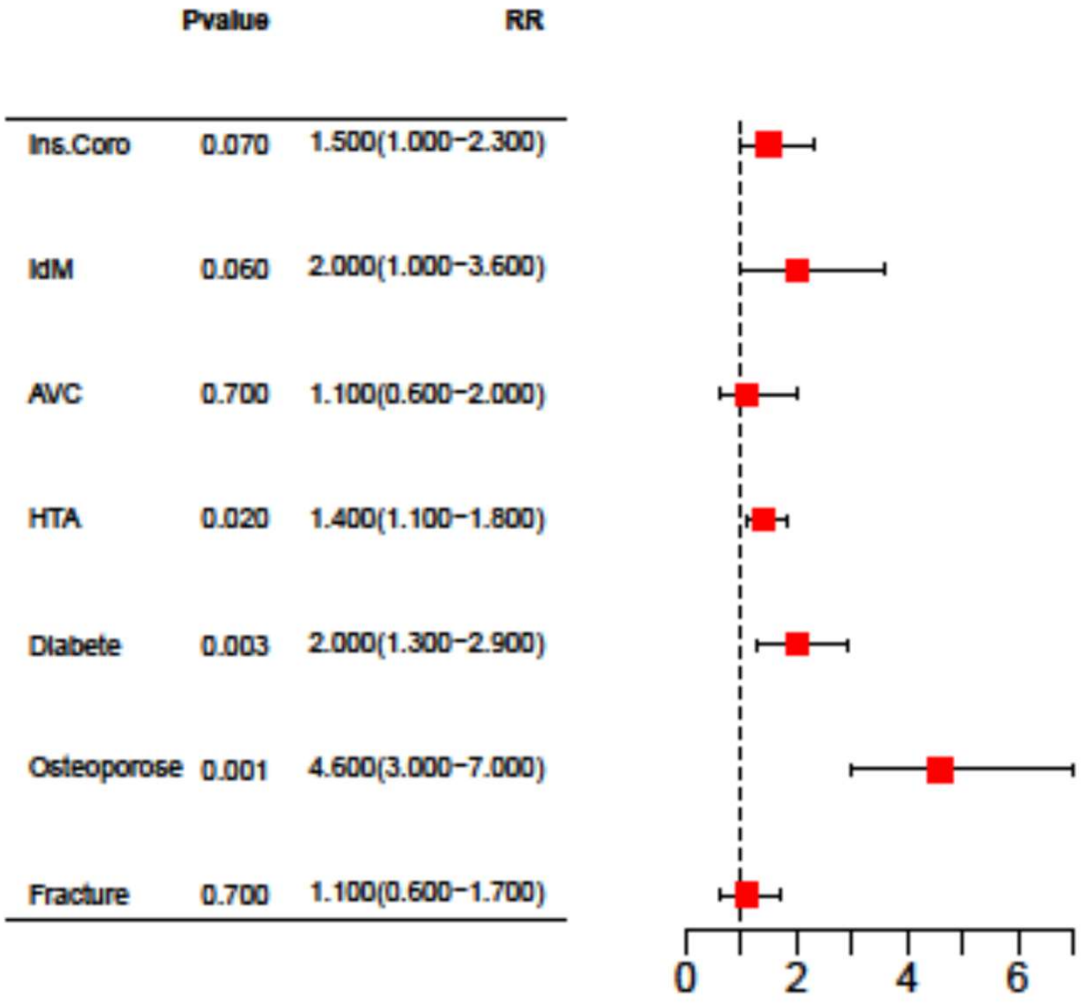


**Table 3.** Details of the adverse events recorded in 72 patients*

| Event | No. of patients affected | Mean ± SD time of occurrence from CS initiation, months |
|---|---|---|
| Subclinical osteoporosis | 10 | 28 ± 23 |
| Infection requiring hospitalization | 8 | 22 ± 25 |
| Osteoporotic fractures | 7 | 26 ± 16 |
| Arterial hypertension | 7 | 14 ± 13 |
| Thromboembolic events | 7 | 6 ± 7 |
| Diabetes mellitus | 5 | 22 ± 21 |
| Adrenal insufficiency | 5 | 25 ± 21 |
| Ophthalmologic complications | 4 | 16 ± 8 |
| Osteonecrosis of the femoral head | 3 | 21 ± 9 |
| Cardiovascular damage | 3 | 21 ± 15 |
| CS-induced myopathy | 2 | 6 ± 6 |
| Malignancy | 2 | 16 ± 15 |
| Hepatotoxicity | 2 | 36 ± 24 |
| Drug eruption | 2 | 4 ± 3 |
| Tendon rupture | 2 | 42 ± 26 |
| Sleep apnea syndrome | 2 | 72 ± 44 |
| Esophageal candidiasis | 2 | 8 ± 7 |
| Gastrointestinal ulcers | 1 | 15 |
| Hematologic toxicity | 1 | 22 |
| Azoospermia | 1 | 121 |
| Cyclophosphamide-induced cystitis | 1 | 16 |

Ribi C, *et al*. Arthritis Rheum 2008




Adapté de : Englund M, *et al*. J Rheumatol 2016


LoVAS
RITAZAREM
ADVOCATE
PEXIVAS
MAINRITSAN3
MAINRITSAN2
MAINRITSAN1
BREVAS
RAVE
RATTRAP
WGET
CORTAGE
REMAIN
MYCYC
IMPROVE
CHUSPAN2
CHUSPAN
MEPEX
CYCLOPS
NORAM
CYCAZAREM

| | France | | | Europe | Etats-Unis | | Monde | |
|---|---|---|---|---|---|---|---|---|
| **Délai depuis le début du traitement** | **Principaux points de repère** | **CHUSPAN 2** | **CORTAGE bras réduit** | **CYC-AZAREM** | **WGET** | **RAVE** | **PEXIVAS standard** | **PEXIVAS dose réduite** |
| **0** | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 |
| **1 semaine** | 60 | 60 | 60 | 45 | 60 | 60 | 60 | 30 |
| **2 semaines** | 60 | 60 | 60 | 30 | 60 | 60 | 50 | 25 |
| **3 semaines** | 40 | 52,5 | 55 | 25 | 60 | 60 | 50 | 25 |
| **4 semaines** | 40 | 52,5 | 50 | 25 | 60 | 40 | 40 | 20 |
| **6 semaines** | 30 | 45 | 40 | 20 | 40 | 30 | 30 | 15 |
| **8 semaines** | 25 | 37,5 | 30 | 15 | 20 | 20 | 25 | 12,5 |
| **12 semaines** | 20 | 22,5 | 25 | 15 | 15 | 10 | 15 | 7,5 |
| **16 semaines** | 15 | 10 | 15 | 12,5 | 7,5 | 5 | 10 | 5 |
| **6 mois** | 10 | 7 | 7 | 10 | 0 | 0 | 7,5 | 5 |
| **9 mois** | 7 | 3 | 0 | 10 | 0 | 0 | 5 | 5 |
| **12 mois** | 5 | 0 | 0 | 7,5 | 0 | 0 | 5 | 5 |
| **15 mois** | 5 | 0 | 0 | 5-7,5 | 0 | 0 | 0-5 | 0-5 |
| **18 mois** | 0-5 | 0 | 0 | 5 | 0 | 0 | 0-5 | 0-5 |

LoVAS
RITAZAREM
ADVOCATE
PEXIVAS
MAINRITSAN3
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BMJ Open

# Comparative efficacy and safety of alternative glucocorticoids regimens in patients with ANCA-associated vasculitis: a systematic review

Yingqi Xiao [1,2] Gordon Guyatt,[1,3] Linan Zeng [1,4] David RW Jayne,[5] Peter A Merkel,[6] Reed AC Siemieniuk [1,3] Jared E Dookie,[7] Tayler A Buchan,[1] Muhammad Muneeb Ahmed [8] Rachel J Couban,[9] Alfred Mahr,[10] Michael Walsh [1,3,11]

Xiao Y, *et al*. BMJ Open 2022

LoVAS
RITAZAREM
ADVOCATE
PEXIVAS
MAINRITSAN3
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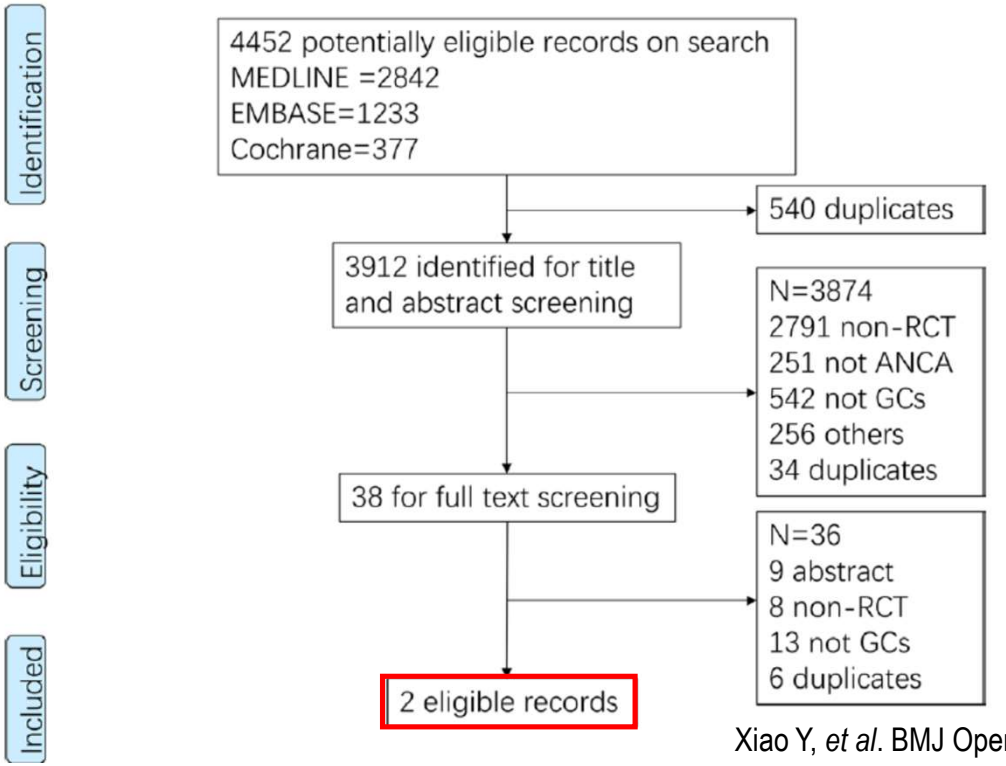



Xiao Y, *et al*. BMJ Open 2022

Table 1 Characteristics of studies originally planned to be included

| Author (year) | Name of the study (Clinicaltrials.gov number) | Country | Study design | Intervention and comparison (number of patients)* | Patients | Outcomes |
|---|---|---|---|---|---|---|
| Walsh *et al* (2020)[24] | PEXIVAS (NCT00987389) | Multiple countries | Phase III, randomised, open label, 704 patients | Intervention: reduced-dose GC therapy (initial dose: 50–75 mg; maintenance dose continues at 5 mg/day from the end of week 23 until at least week 52; accumulative dose less than 60% of the standard) | 353 patients with severe AAV (mean age 63 years, 44% female) | Primary outcome: a composite of death from any cause or ESKD. Secondary outcomes: death from any cause, ESKD, sustained remission, serious adverse events, serious infections within 1 year and health-related quality of life. |
| | | | | Comparison: standard-dose GC therapy (initial dose: 50–75 mg; maintenance dose continues at 5 mg/day from the end of week 23 until at least week 52) | 351 patients with severe AAV (mean age 63 years, 43% female) | |
| Furuta *et al* (2021)[18] | LoVAS (NCT02198248) | Japan, multicentric | Phase IV, randomised, open label, 140 patients | Intervention : low-dose GC treatment (initial dose : 0.5 mg/kg/day; discontinued at 5 months) | 70 patients with new diagnosis of AAV (median age: 73; 43% female) | Primary outcome: remission rate at 6 months. Secondary outcomes: time to remission, death, relapse, ESKD and the first serious adverse event, proportion of death, relapse and ESKD for efficacy at 6 months |
| | | | | Comparison : high-dose GC treatment (initial dose : 1 mg/kg/day; reduced to 10 mg/day by 5 months) | 70 patients with new diagnosis of AAV (median age: 74; 37% female) | |

**PEXIVAS**

**LoVAS**

# EULAR recommendations for the management of ANCA-associated vasculitis: 2022 update

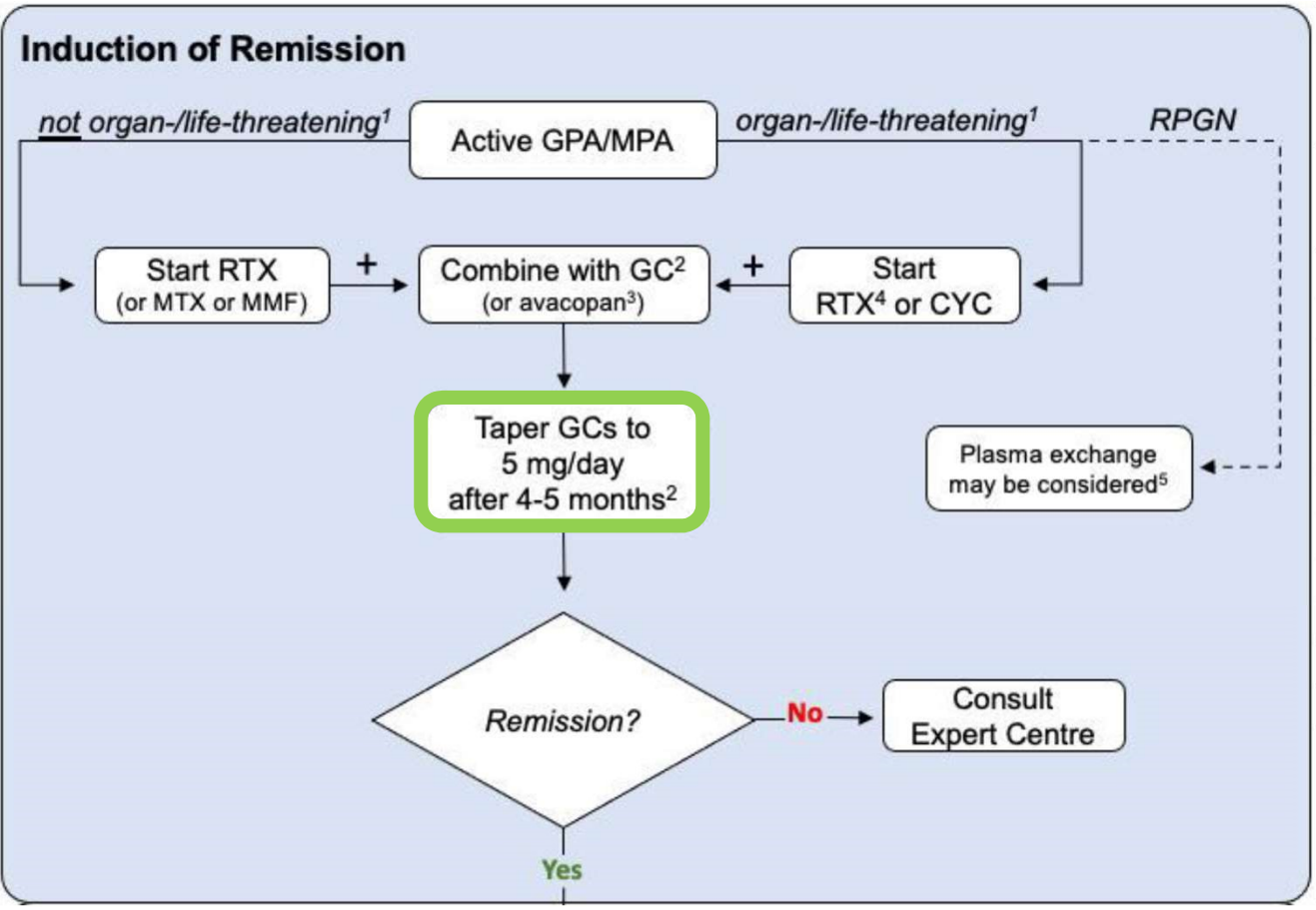


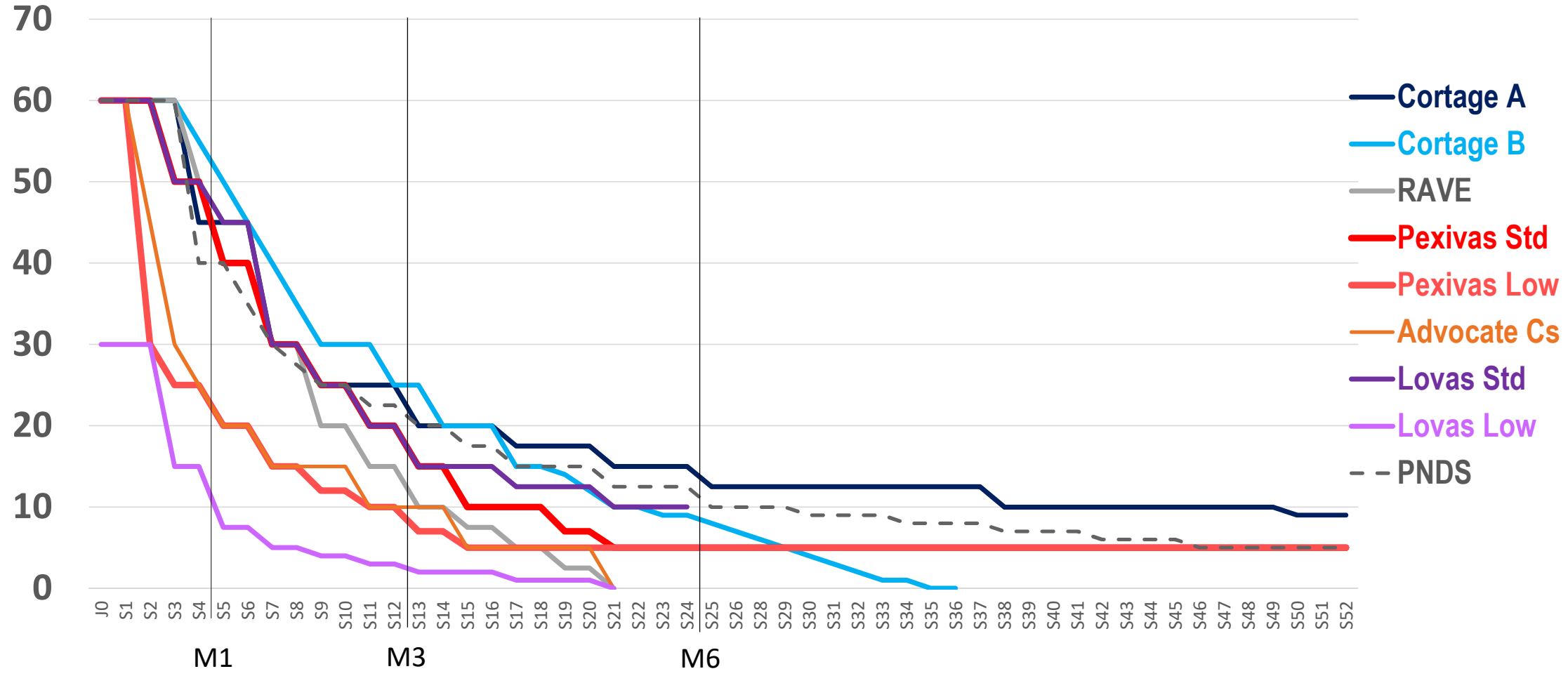

**Table 4** Glucocorticoid dosing (mg/day, prednisolone equivalent) with rituximab or cyclophosphamide-based regimens for remission induction in GPA or MPA according to the PEXIVAS Study[93]

| | Body weight (kg) | | |
|---|---|---|---|
| Weeks | <50 | 50–75 | >75 |
| 1* | 50 | 60 | 75 |
| 2 | 25 | 30 | 40 |
| 3–4 | 20 | 25 | 30 |
| 5–6 | 15 | 20 | 25 |
| 7–8 | 12.5 | 15 | 20 |
| 9–10 | 10 | 12.5 | 15 |
| 11–12 | 7.5 | 10 | 12.5 |
| 13–14 | 6 | 7.5 | 10 |
| 15–18 | 5 | 5 | 7.5 |
| 19–52 | 5 | 5 | 5 |
| >52 | Individual taper | Individual taper | Individual taper |

*Consider use of intravenous methylprednisolone at a cumulative dose of 1–3 g on days 1–3 in patients with severely active disease, including but not limited to renal involvement with a documented estimated glomerular filtration rate <50 mL/min/1.73 $m^2$ and/or diffuse alveolar haemorrhage.
GPA, granulomatosis with polyangiitis; MPA, microscopic polyangiitis.

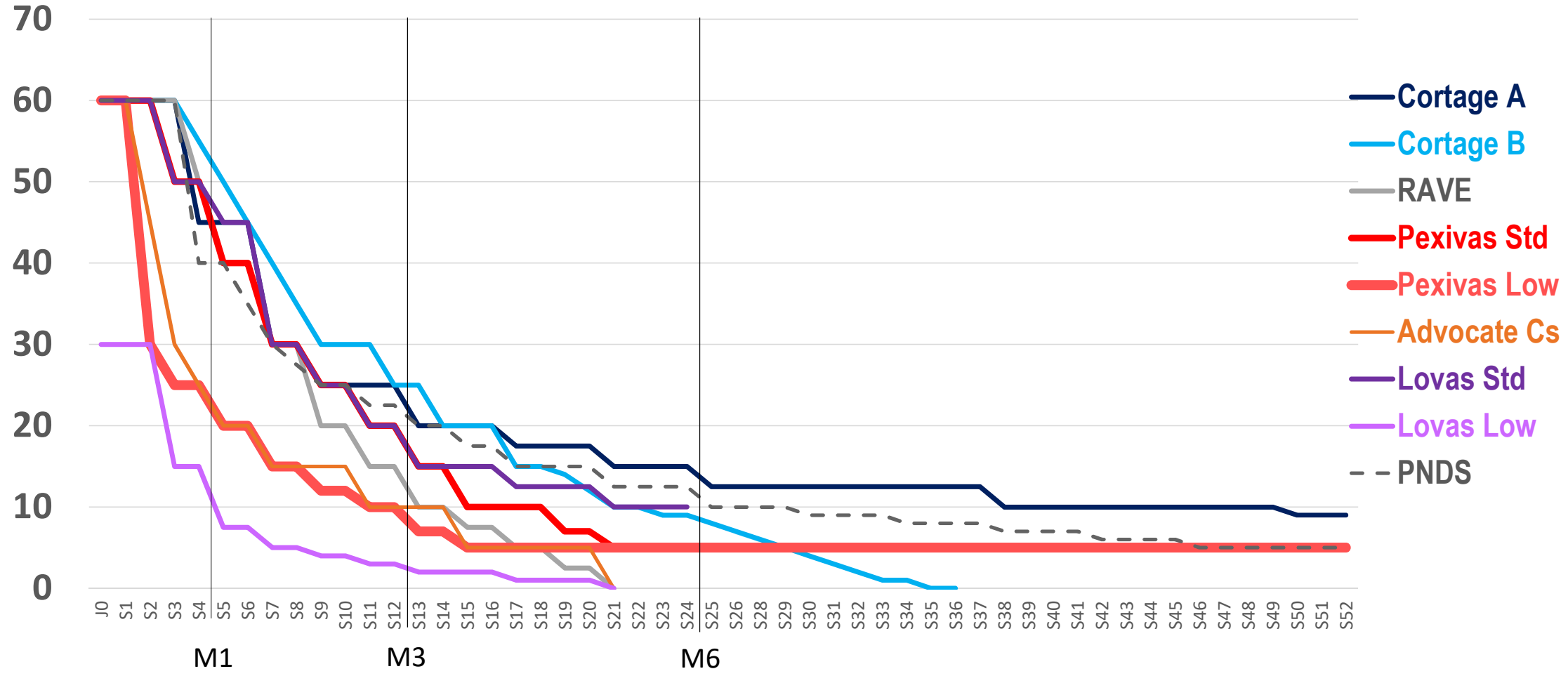
Hellmich B, *et al*. Ann Rheum Dis 2022

# Décroissance protocolaire




Hellmich B, *et al*. Ann Rheum Dis 2022

# PEXIVAS




Hellmich B, *et al*. Ann Rheum Dis 2022

ORIGINAL ARTICLE

# Plasma Exchange and Glucocorticoids in Severe ANCA-Associated Vasculitis

M. Walsh, P.A. Merkel, C.-A. Peh, W.M. Szpirt, X. Puéchal, S. Fujimoto, C.M. Hawley, N. Khalidi, O. Floßmann, R. Wald, L.P. Girard, A. Levin, G. Gregorini, L. Harper, W.F. Clark, C. Pagnoux, U. Specks, L. Smyth, V. Tesar, T. Ito-Ihara, J.R. de Zoysa, W. Szczeklik, L.F. Flores-Suárez, S. Carette, L. Guillevin, C.D. Pusey, A.L. Casian, B. Brezina, A. Mazzetti, C.A. McAlear, E. Broadhurst, D. Reidlinger, S. Mehta, N. Ives, and D.R.W. Jayne, for the PEXIVAS Investigators*

# Critère principal

## Mort ou IRCT

## à 1 an
## ↓infections sévères

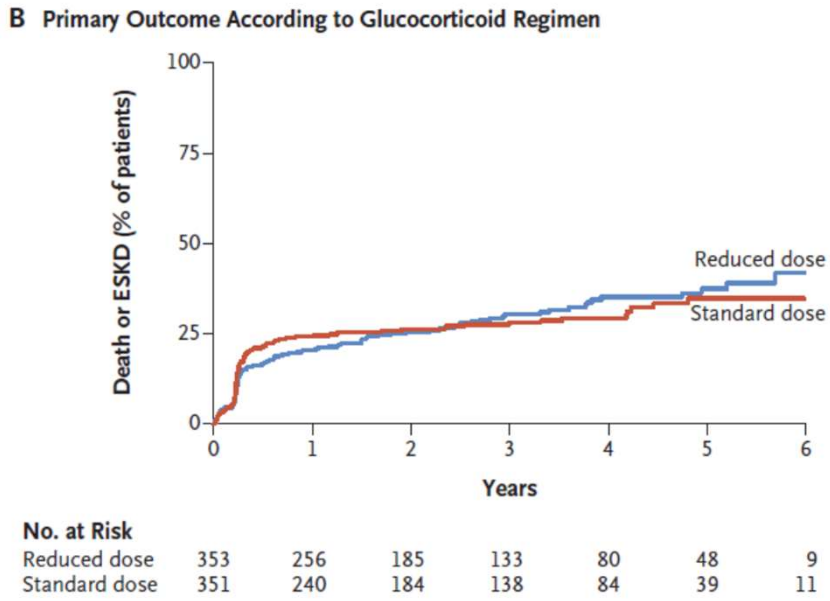



**Table 3. Secondary Outcomes.***

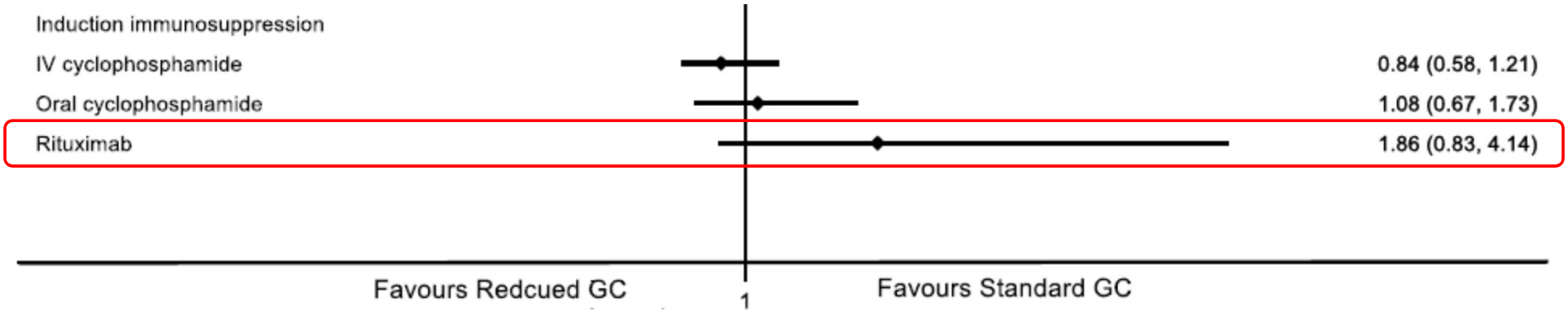
| Secondary Outcome | Plasma Exchange vs. No Plasma Exchange | Reduced-Dose vs. Standard-Dose Glucocorticoid Regimen |
|---|---|---|
| | *effect size (95% CI)* | |
| Death from any cause | 0.87 (0.58–1.29) | 0.78 (0.53–1.17) |
| End-stage kidney disease | 0.81 (0.57–1.13) | 0.96 (0.68–1.34) |
| Sustained remission | 1.01 (0.89–1.15) | 1.04 (0.92–1.19) |
| Serious adverse events | 1.21 (0.96–1.52) | 0.95 (0.75–1.20) |
| Serious infections at 1 year | 1.16 (0.87–1.56) | 0.69 (0.52–0.93) |

**Table 1. Characteristics of the Patients at Baseline.***

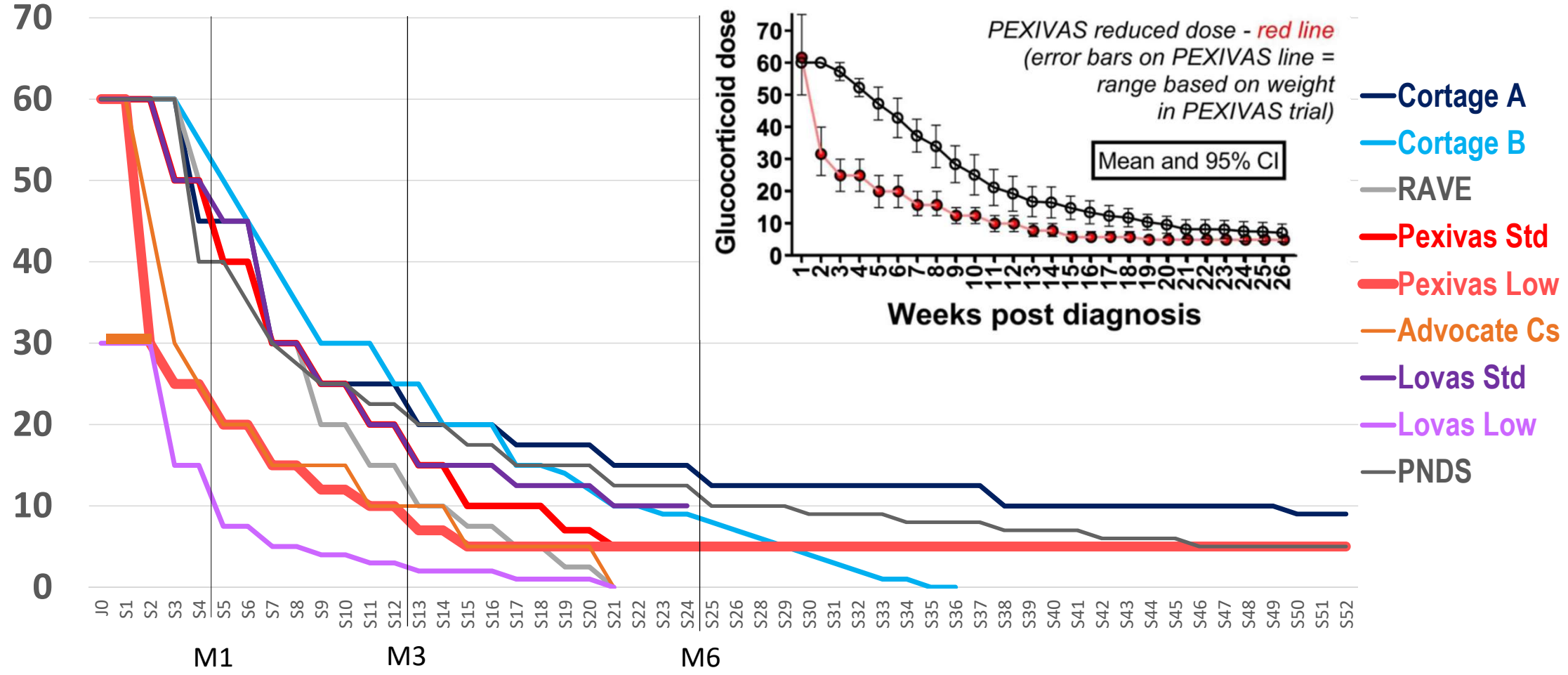
| Characteristic | Plasma Exchange (N=352) | No Plasma Exchange (N=352) | Reduced-Dose Glucocorticoid Regimen (N=353) | Standard-Dose Glucocorticoid Regimen (N=351) |
|---|---|---|---|---|
| Age — yr | 62.8±14.4 | 63.5±13.7 | 63.3±14.2 | 63.1±13.9 |
| Female sex — no. (%) | 149 (42.3) | 158 (44.9) | 156 (44.2) | 151 (43.0) |
| History of vasculitis — no. (%) | 35 (9.9) | 28 (8.0) | 34 (9.6) | 29 (8.3) |
| ANCA subtype — no. (%) | | | | |
| Proteinase 3 | 143 (40.6) | 143 (40.6) | 143 (40.5) | 143 (40.7) |
| Myeloperoxidase | 209 (59.4) | 209 (59.4) | 210 (59.5) | 208 (59.3) |
| Median C-reactive protein level (IQR) — mg/liter | 50.9 (13.8–122.8) | 42.1 (14.0–97.2) | 44.6 (13.0–117.0) | 45.5 (14.0–98.0) |
| Median hemoglobin level (IQR) — g/liter | 94 (83–105) | 95 (85–105) | 95 (84–105) | 95 (84.5–105) |
| Kidney function | | | | |
| Median serum creatinine level (IQR) — μmol/liter | 327 (206–491) | 336 (209–495) | 320 (190–480) | 335 (219–502) |
| Serum creatinine level ≥500 μmol/liter or undergoing dialysis — no. (%) | 101 (28.7) | 104 (29.5) | 102 (28.9) | 103 (29.3) |
| Undergoing dialysis — no. (%) | 66 (18.8) | 74 (21) | 67 (19.0) | 73 (20.8) |
| Planned immunosuppressive treatment — no. (%) | | | | |
| Intravenous cyclophosphamide | 177 (50.3) | 177 (50.3) | 179 (50.7) | 175 (49.9) |
| Oral cyclophosphamide | 120 (34.1) | 121 (34.4) | 120 (34.0) | 121 (34.5) |
| Rituximab | 55 (15.6) | 54 (15.3) | 54 (15.3) | 55 (15.7) |

# Signal sous RTX ?

| Planned immunosuppressive treatment — no. (%) | | | | |
|---|---|---|---|---|
| Intravenous cyclophosphamide | 177 (50.3) | 177 (50.3) | 179 (50.7) | 175 (49.9) |
| Oral cyclophosphamide | 120 (34.1) | 121 (34.4) | 120 (34.0) | 121 (34.5) |
| Rituximab | 55 (15.6) | 54 (15.3) | 54 (15.3) | 55 (15.7) |



# Décroissance protocolaire




Hellmich B, *et al*. Ann Rheum Dis 2022

# Schéma de décroissance ?

Screening : maxi CsPO x **14 jours**

| Week | Standard | | | Reduced Dose | | |
|---|---|---|---|---|---|---|
| | <50 kg | 50-75 kg | >75 kg | <50 kg | 50-75 kg | >75 kg |
| | pulse | pulse | pulse | pulse | pulse | pulse |
| 1-2 | 50 | 60 | 75 | 25 | 30 | 40 |
| 3-4 | 40 | 50 | 60 | 20 | 25 | 30 |
| 5-6 | 30 | 40 | 50 | 15 | 20 | 25 |
| 7-8 | 25 | 30 | 40 | 12 | 15 | 20 |
| 9-10 | 20 | 25 | 30 | 10 | 12 | 15 |
| 11-12 | 15 | 20 | 25 | 7 | 10 | 12 |

Protocole version 2009

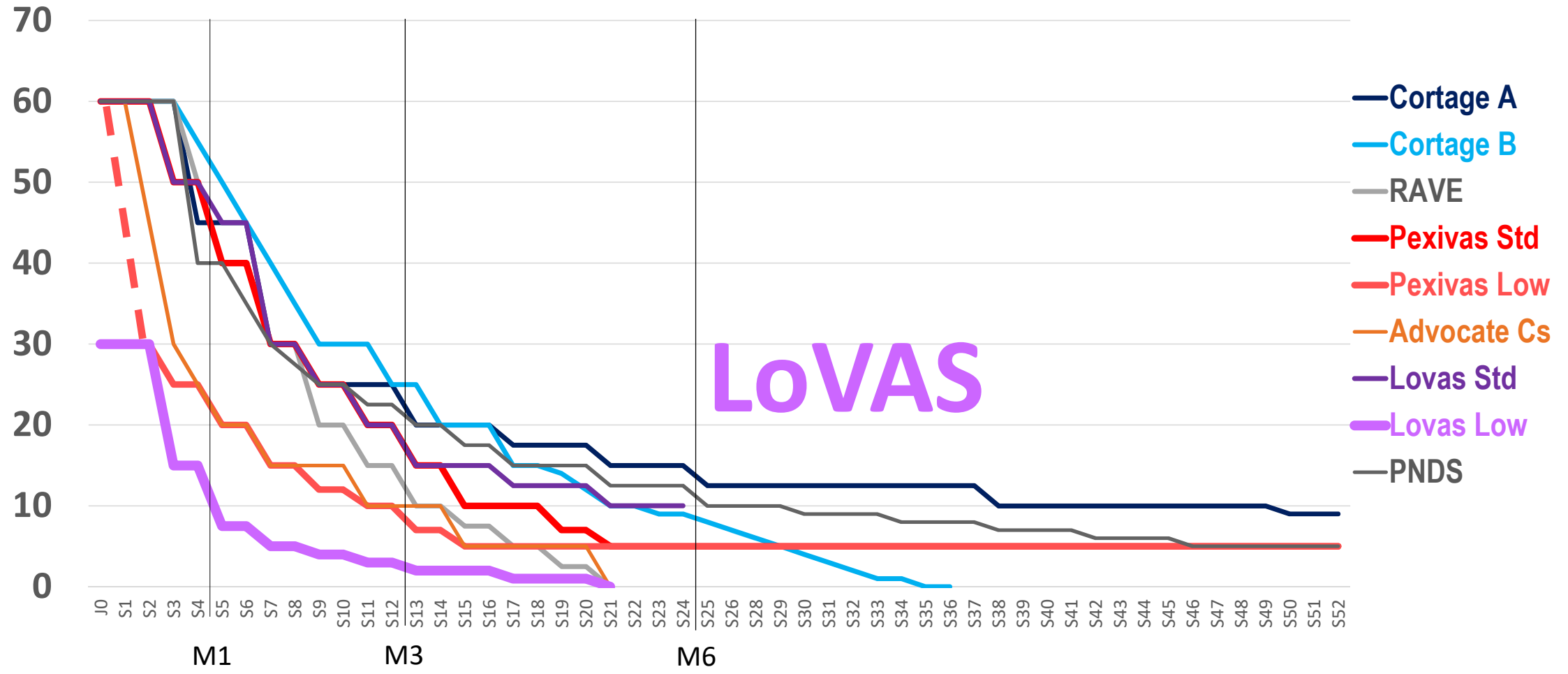
pour tous : **MP 1 à 3g** (voire+)

| Week | Standard | | | Reduced-dose | | |
|---|---|---|---|---|---|---|
| | <50 kg | 50-75 kg | >75 kg | <50 kg | 50-75 kg | >75 kg |
| | pulse | pulse | pulse | pulse | pulse | pulse |
| 1 | 50 | 60 | 75 | 50 | 60 | 75 |
| 2 | 50 | 60 | 75 | 25 | 30 | 40 |
| 3-4 | 40 | 50 | 60 | 20 | 25 | 30 |
| 5-6 | 30 | 40 | 50 | 15 | 20 | 25 |
| 7-8 | 25 | 30 | 40 | 12.5 | 15 | 20 |
| 9-10 | 20 | 25 | 30 | 10 | 12.5 | 15 |
| 11-12 | 15 | 20 | 25 | 7.5 | 10 | 12.5 |

Protocole version 2013 / 2014 ?

Walsh M, et al. NEJM 2020

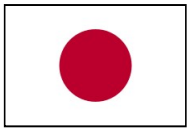
# LoVAS


70
60
50
40
30
20
10
0
J0 S1 S2 S3 S4 S5 S6 S7 S8 S9 S10 S11 S12 S13 S14 S15 S16 S17 S18 S19 S20 S21 S22 S23 S24 S25 S26 S28 S29 S30 S31 S32 S33 S34 S35 S36 S37 S38 S39 S40 S41 S42 S43 S44 S45 S46 S47 S48 S49 S50 S51 S52
M1
M3
M6
LoVAS
Cortage A
Cortage B
RAVE
Pexivas Std
Pexivas Low
Advocate Cs
Lovas Std
Lovas Low
PNDS

JAMA | Original Investigation

# Effect of Reduced-Dose vs High-Dose Glucocorticoids Added to Rituximab on Remission Induction in ANCA-Associated Vasculitis

## A Randomized Clinical Trial



**LoVAS**

Shunsuke Furuta, MD, PhD; Daiki Nakagomi, MD, PhD; Yoshihisa Kobayashi, MD, PhD; Masaki Hiraguri, MD; Takao Sugiyama, MD, PhD; Koichi Amano, MD, PhD; Takeshi Umibe, MD, PhD; Hajime Kono, MD, PhD; Kazuhiro Kurasawa, MD, PhD; Yasuhiko Kita, MD, PhD; Ryutaro Matsumura, MD, PhD; Yuko Kaneko, MD, PhD; Keita Ninagawa, MD; Keiju Hiromura, MD, PhD; Shin-ichiro Kagami, MD, PhD; Yosuke Inaba, PhD; Hideki Hanaoka, MD, PhD; Kei Ikeda, MD, PhD; Hiroshi Nakajima, MD, PhD; for the LoVAS Collaborators

- Japon 2014-2019
- **140 VAA nouvellement diagnostiquées, induction RTX**
- Exclues : GN et/ou HIA sévère (DFG<15ml/min; O2 2L)
- Non infériorité : Cs standard vs Cs réduit **en ouvert**
- DFG méd = 53ml/min  âge moyen = 73 ans
- Naïf 100%  **MPO=85%**  PR3=15%

Furuta S, *et al*. JAMA 2021

# Posologie et décroissance

Screening : maxi CsPO x **7 jours** à 0,5mg/kg MP : ? (4x125 avec RTX)

| weeks | | BW: 60kg (Low dose) | | BW: 60kg (High dose) | |
|---|---|---|---|---|---|
| 1-2 | | 30 mg/day | | 60 mg/day | |
| 3-4 | | 15 mg/day | | 50 mg/day | |
| 5-6 | | 7.5 mg/day | | 45 mg/day | |
| 7-8 | *Report possible si -Actif -CRP+ -ANCA+* | 5 mg/day | | 30 mg/day | |
| 9-10 | | 4 mg/day | | 25 mg/day | |
| 11-12 | | 3 mg/day | | 20 mg/day | M3 |
| 13-16 | | 2 mg/day | | 15 mg/day | |
| 17-20 | | 1 mg/day | | 12.5 mg/day | |
| 21-24 | | 0 mg/day | | 10 mg/day | M6 |
| cumulative dose | | 987 mg/24 weeks | | 4200 mg/24 weeks | |

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# Efficacité à 6 mois

| Outcomes | Reduced-dose glucocorticoid plus rituximab (n = 69) No. (%) with data | Median (IQR) | High-dose glucocorticoid plus rituximab (n = 65) No. (%) with data | Median (IQR) | Absolute difference (95% CI) | *P* value[a] |
|---|---|---|---|---|---|---|
| **Primary outcomes** | | | | | | |
| Remission[b] | 49 (71.0) | **70%** | 45 (69.2) | **69%** | 1.8 (−13.7 to ∞)[c] | .003[d] |
| **Secondary outcomes** | | | | | | |
| Remission[b,e] | 49 (71.0) | | 45 (69.2) | | 0.6 (−15.3 to ∞)[c,f] | .005[d] |
| Relapse[b] | 3 (4.3) | | 0 | | 4.4 (−0.5 to 9.2) | .24 |
| Deaths[b] | 2 (2.9) | | 3 (4.6) | | −1.7 (−4.7 to 8.2) | .67 |
| End-stage kidney disease[b] | 0 | | 1 (1.5) | | −1.5 (−4.5 to 1.5) | .48 |
| Prednisolone, mg | | | | | | |
| Cumulative dose | 65 (94.2) | 1318 (989 to 1770) | 62 (95.4) | 4151.25 (3795.25 to 4376) | −2599.3 (−2856 to −2342)[g] | <.001 |
| Dose at 6 mo | 65 (94.2) | 2.0 (0 to 7.5) | 62 (95.4) | 10.0 (9.0 to 10.0) | −5.5 (−7.0 to −4.0)[g] | <.001 |
| SF-36 component summary | | | | | | |
| Physical[h] | 54 (78.2) | 38.3 (21.1 to 47.4) | 49 (75.3) | 31.7 (22.0 to 49.4) | 6.3 (−2.6 to 15.2) | .43 |
| Mental[i] | 54 (78.2) | 49.8 (45.1 to 56.6) | 49 (75.3) | 50.4 (46.3 to 57.2) | −0.4 (−4.7 to 4.0) | .65 |
| Birmingham Vasculitis Activity Score[j] | 65 (94.2) | 0 (0 to 1) | 58 (89.2) | 0 (0 to 0) | 0 (0 to 0) | .65 |

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# Efficacité à 6 mois

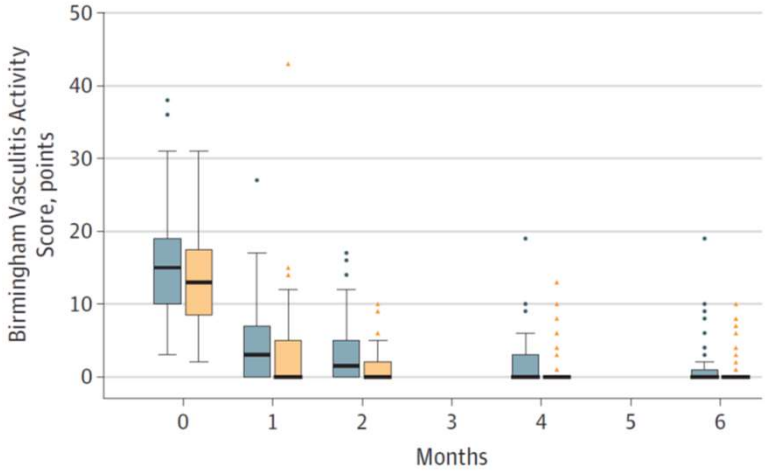
- **Bras allégé**

  22 (32%) ont reporté la phase de sevrage

  11 BVAS >1 ; 6 CRP+ ; 17 ANCA$^{hi}$

  27 (39%) ont arrêté la corticothérapie à 6 mois

**càd ré-ajustement chez 60-70% des patients**

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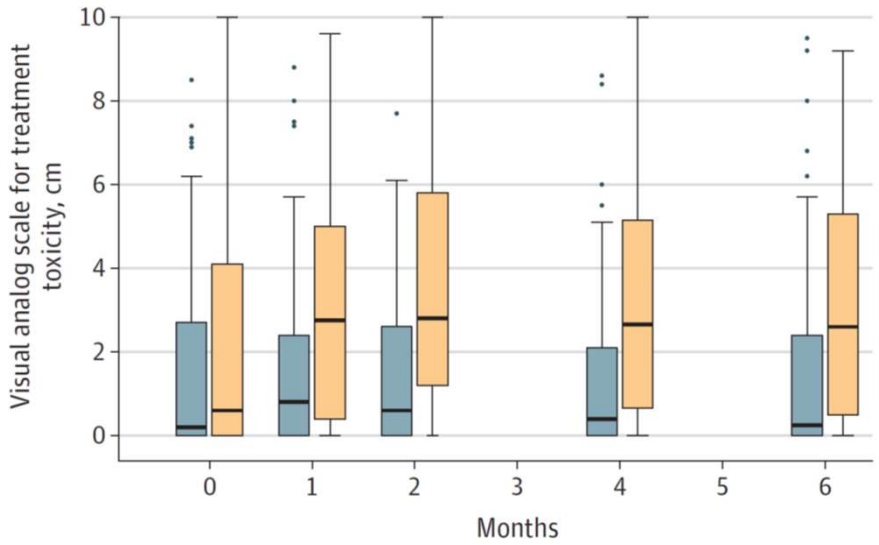
# Tolérance

| | No. of events (No. of patients[a]) | | p |
|---|---|---|---|
| | Reduced-dose glucocorticoid plus rituximab (n = 69) | High-dose glucocorticoid plus rituximab (n = 65) | |
| Serious adverse events[b] | 21 (13) | 41 (24) | 0.02 |
| Treatment-related serious adverse events[c] | 15 (9) | 31 (22) | |
| Serious infection[d] | 7 (5) | 20 (13) | 0.04 |
| Death | 2 (2) | 3 (3) | |
| Cancers[e] | 1 (1) | 1 (1) | |
| Predefined adverse events[f] | | | |
| Serious and nonserious infection | 15 (11) | 45 (29) | <0.001 |
| New-onset | | | |
| Dyslipidemia | 12 (12) | 17 (17) | |
| Hypertension | 11 (11) | 14 (14) | |
| Insomnia | 10 (10) | 23 (23) | 0.02 |
| Diabetes | 9 (9) | 19 (19) | <0.001 |

**EVA patient**




*p*=0.03

However, assessment of glucocorticoid-related adverse effects might be influenced by an open-label design. Knowledge of how much prednisolone a patient received could affect the investigators' decision of initiation of treatments for glucocorticoid-related adverse effects and the reported numbers of patients with new-onset adverse effects requiring treatment.

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# Tolérance

| | No. of events (No. of patients[a]) | | *p* |
|---|---|---|---|
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| Serious adverse events[b] | 21 (13) | 41 (24) | 0.02 |
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| Serious and nonserious infection | 15 (11) | 45 (29) | <0.001 |
| New-onset | | | |
| Dyslipidemia | 12 (12) | 17 (17) | |
| Hypertension | 11 (11) | 14 (14) | |
| Insomnia | 10 (10) | 23 (23) | 0.02 |
| Diabetes | 9 (9) | 19 (19) | <0.001 |

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À 2 ans

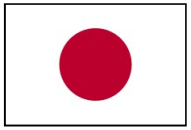
**Table 1** Adverse events according to the study group

| | Reduced-dose glucocorticoid plus rituximab (n=69) | High-dose glucocorticoid plus rituximab (n=65) | |
|---|---|---|---|
| | No. of events (no. of patients*) | No. of events (no. of patients*) | P value |
| Serious adverse events† | 36 (19) | 54 (30) | 0.025 |
| Serious infection‡ | 17 (7) | 25 (16) | 0.026 |
| Death | 2 (2) | 5 (5) | 0.212 |
| Cancers | 2 (2) | 2 (2) | >0.999 |
| Predefined adverse events§ | | | |
| Serious and non-serious infection | 55 (21) | 75 (40) | <0.001 |
| New-onset dyslipidaemia | 16 (16) | 19 (19) | 0.426 |
| New-onset hypertension | 14 (14) | 12 (12) | 0.789 |
| New-onset insomnia | 11 (10) | 22 (22) | 0.016 |
| New-onset diabetes mellitus | 11 (11) | 18 (18) | 0.098 |
| Pathological fracture | 1 (1) | 7 (7) | 0.022 |

Furata S, *et al*. ARD 2023

Table 1. Baseline Demographics and Characteristics of Evaluated Patients

| | Reduced-dose glucocorticoid plus rituximab (n = 69) | High-dose glucocorticoid plus rituximab (n = 65) |
|---|---|---|
| Age, median (IQR), y | 73 (66-78) | 74 (68-78) |
| Sex, No. (%) | | |
| Female | 43 (62.3) | 37 (56.9) |
| Male | 26 (37.7) | 28 (43.1) |
| Diagnosis, No. (%) | | |
| Microscopic polyangiitis | 53 (76.8) | 51 (78.5) |
| Granulomatosis with polyangiitis | 16 (23.2) | 13 (20.0) |
| Renal-limited vasculitis | 0 (0.0) | 1 (1.5) |
| ANCA positivity, No. (%) | | |
| MPO-ANCA[a] | 60 (86.9) | 55 (84.6) |
| PR3-ANCA[b] | 9 (13.0) | 10 (15.4) |
| Estimated glomerular filtration rate, median (IQR), mL/min/1.73 $m^2$ (normal limits ≥90 mL/min/1.73 $m^2$)[c] | 52.0 (31.4-74.6) | 55.3 (41.2-72.3) |



Pexivas : 63a Advocate 60a

des MPA MPO a/pauci-rénales du sujet âgé asiatique Induit par RTX

# Ce que ces études ne disent pas

# La corticothérapie précédant l'inclusion

- **LoVAS**

  maxi CsPO x **7 jours** à 0,5mg/kg  MP : ? (4x125 avec RTX)

- **PEXIVAS**

  maxi CsPO x **14 jours**  pour tous : **MP 1 à 3g** (voire+)

- **ADVOCATE**

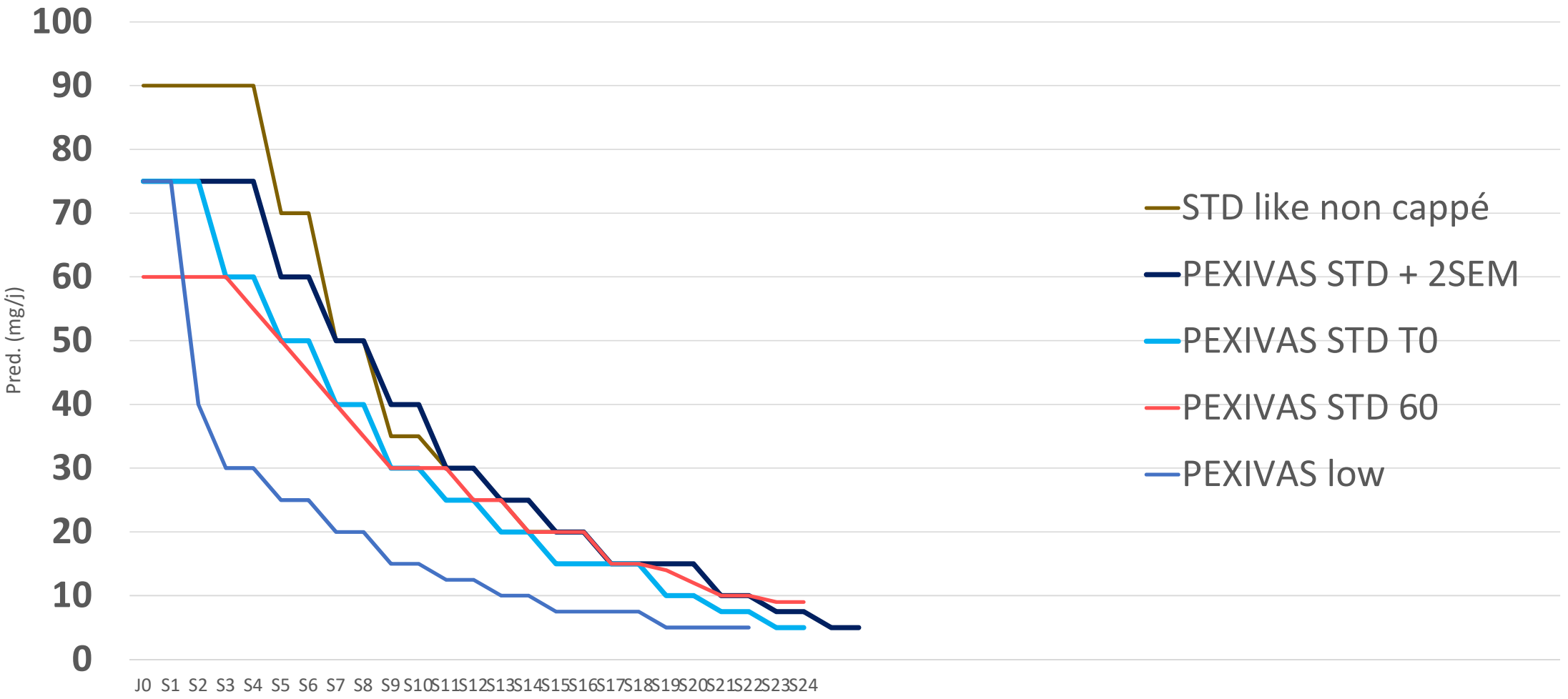
  pré-screen : maxi CsPO x **6 semaines**  screen x max 2 sem

  pré-trial MP: maxi **3g DT**

  =jusqu'à 8 semaines de corticoïdes avant l'inclusion !

# Surpoids : caper ou non ? Quels palliers ?

| Week | Standard | | | Reduced-dose | | |
|---|---|---|---|---|---|---|
| | <50 kg | 50-75 kg | >75 kg | <50 kg | 50-75 kg | >75 kg |
| | pulse | pulse | pulse | pulse | pulse | pulse |
| 1 | 50 | 60 | 75 | 50 | 60 | 75 |
| 2 | 50 | 60 | 75 | 25 | 30 | 40 |
| 3-4 | 40 | 50 | 60 | 20 | 25 | 30 |
| 5-6 | 30 | 40 | 50 | 15 | 20 | 25 |
| 7-8 | 25 | 30 | 40 | 12.5 | 15 | 20 |
| 9-10 | 20 | 25 | 30 | 10 | 12.5 | 15 |
| 11-12 | 15 | 20 | 25 | 7.5 | 10 | 12.5 |


100
90
80
70
60
50
40
30
20
10
0
Pred. (mg/j)
J0 S1 S2 S3 S4 S5 S6 S7 S8 S9 S10 S11 S12 S13 S14 S15 S16 S17 S18 S19 S20 S21 S22 S23 S24
STD like non cappé
PEXIVAS STD + 2SEM
PEXIVAS STD T0
PEXIVAS STD 60
PEXIVAS low

# Conclusion : la corticothérapie allégée

- **Est mieux tolérée**
- **N'est pas moins efficace**

  **LoVAS** : dans les MPA MPO non graves du sujet âgé induites par RTX

  **PEXIVAS** : dans les VAA graves, induites par CYC + MP 1gx3.
- **insuffisemment évaluée**

  dans les VAA graves et/ou granulomateuses

  **et** induites par RTX

- **Moins allégée qu'on ne le pense dans les essais** (screening, MP IV)
- **70% de RC à M6 ne veut pas dire qu'il ne se passe rien entre J0 et M6**

- **CORTAGE**

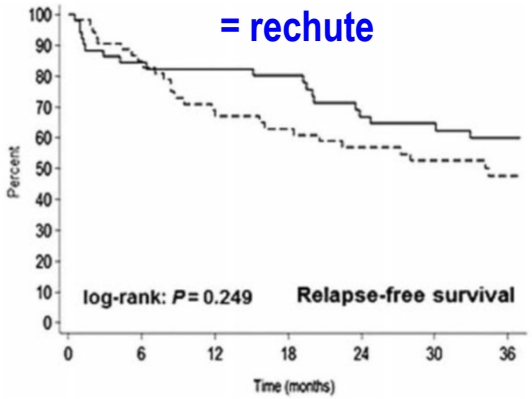
  n=108, >65a

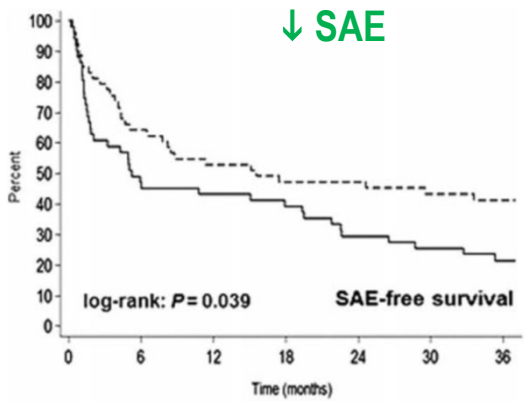
  âge 75a, 33% GPA, Dial=7%

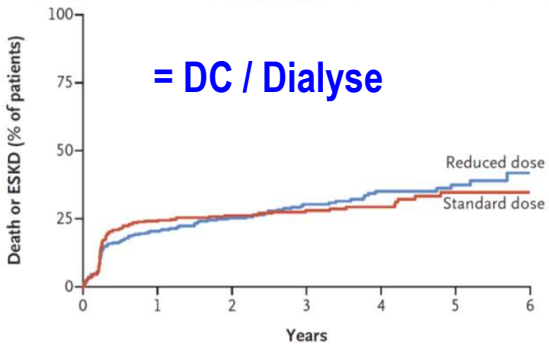
- **PEXIVAS**

  n=704, rénal DFG<50, ou HIA

  âge 63a, 40% PR3, Dial=20%




↓Inf° sévère

**0.69 (0.52-0.93)**

Pagnoux C, *et al*. Arthritis Rheumatol 2015; Walsh M, *et al*. NEJM 2021