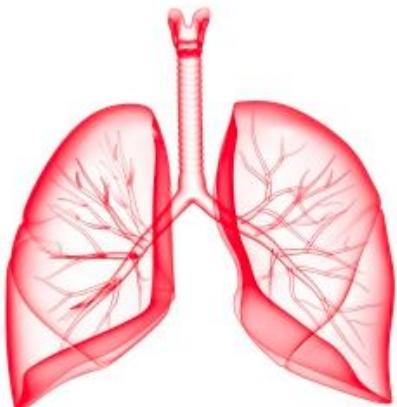


Biothérapies et risque infectieux

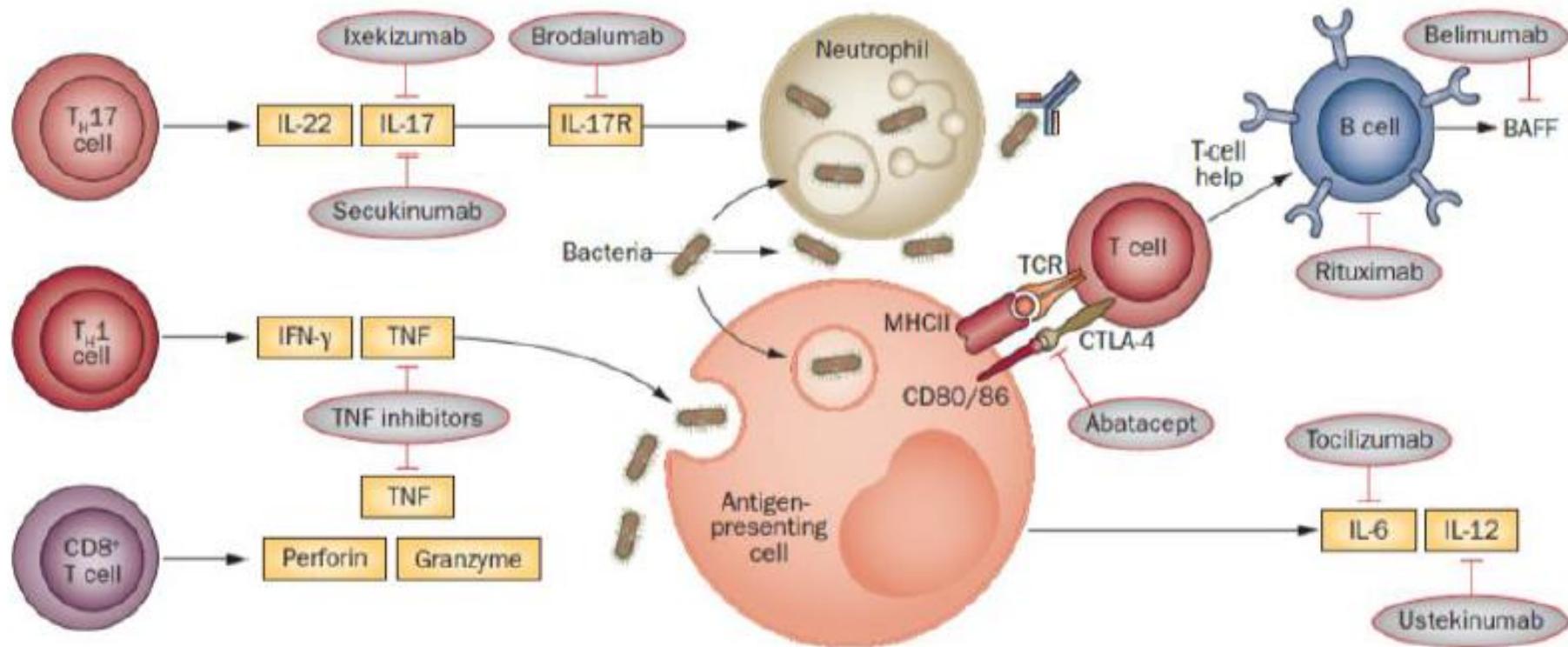
Le poumon



Lidwine Wémeau

Service de Pneumologie et Immuno-Allergologie
Centre de Compétences des Maladies pulmonaires rares
Hôpital Calmette
CHRU Lille

Les biothérapies: une multitude de cibles... Une multitude d'effets secondaires



Anti-TNF α et tuberculose:

Le cas d'école

TUBERCULOSIS ASSOCIATED WITH INFILIXIMAB, A TUMOR NECROSIS FACTOR α -NEUTRALIZING AGENT

JOSEPH KEANE, M.D., SHARON GERSHON, PHARM.D., ROBERT P. WISE, M.D., M.P.H., ELIZABETH MIRABILE-LEVENS, M.D., JOHN KASZNICA, M.D., WILLIAM D. SCHWIETERMAN, M.D., JEFFREY N. SIEGEL, M.D., AND M. MILES BRAUN, M.D., M.P.H.

2001

- 70 cas (USA et Europe)
- Age médian: 53 ans
- délai médian au Dg: 12 sem
- Forme pulmonaire: 31%
- Extra-pulmonaire: 33%
- Disséminée: 42%
- Contage récent: 3%
- Incidence (PR):
 - 24,4 cas/100000 sur 1 an
 - Vs 6,2 cas/100000/an
- 12 décès (4 imputables)

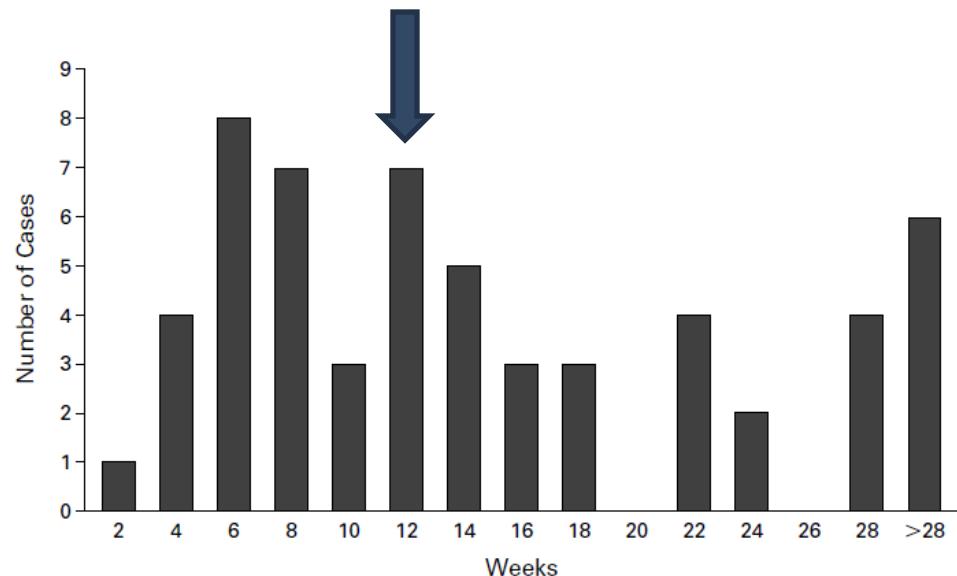
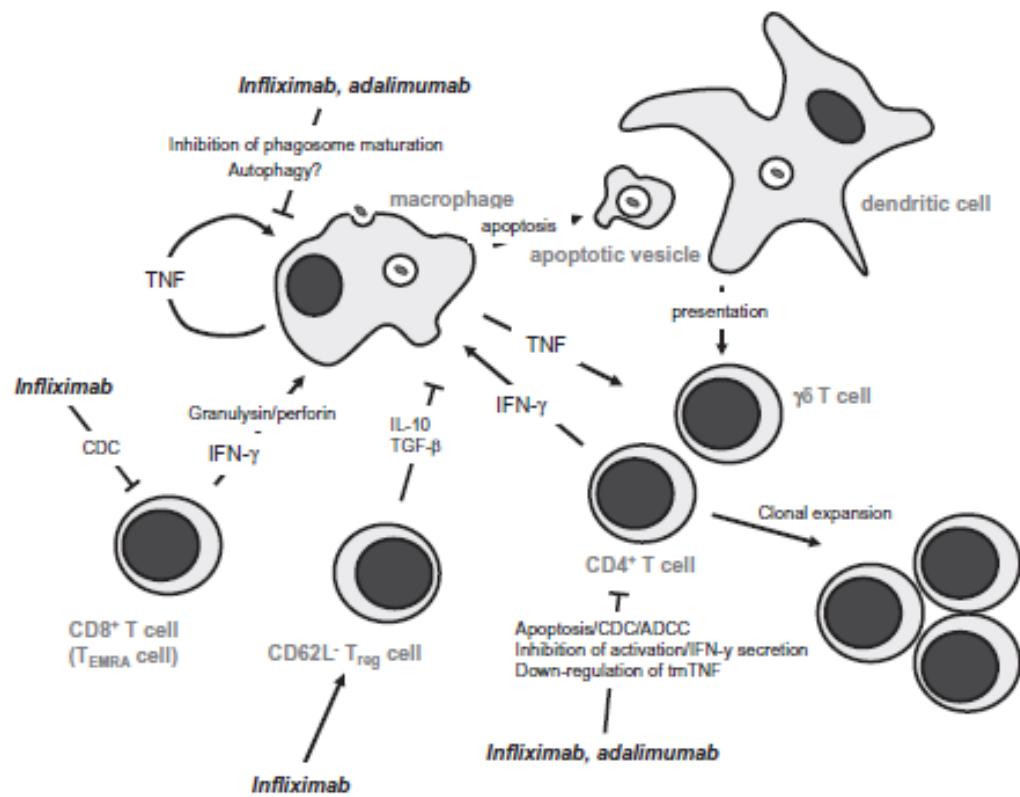
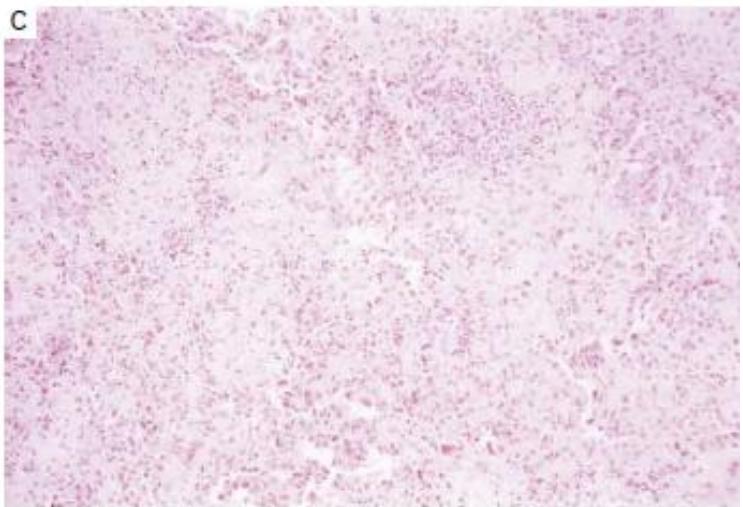
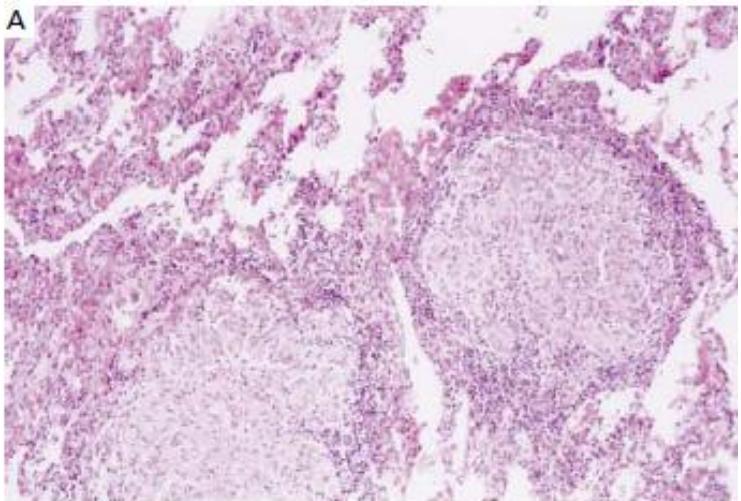


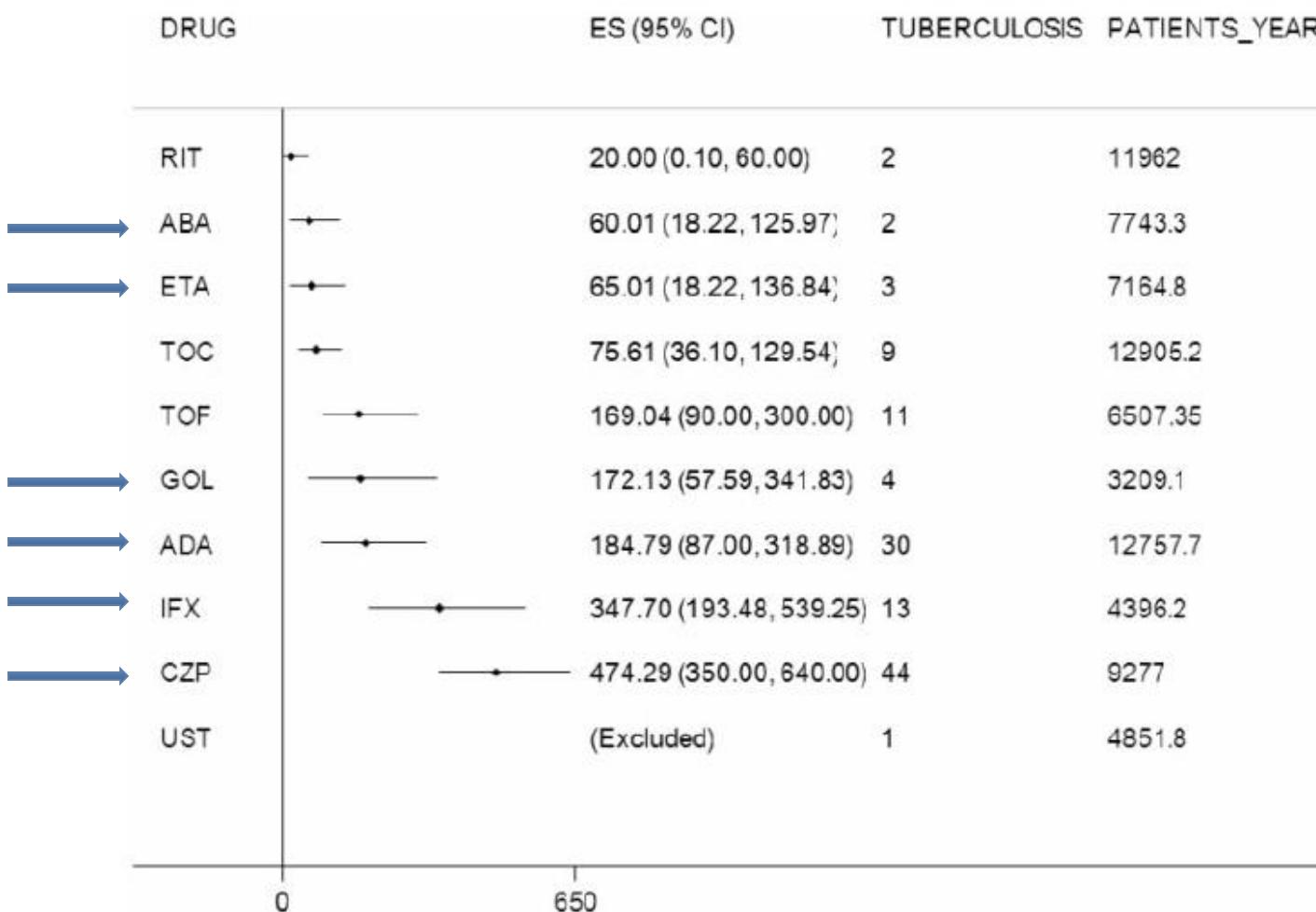
Figure 1. Time from the Initiation of Infliximab Therapy to the Diagnosis of Tuberculosis.
Data were available for 57 patients, most of whom had received monthly infusions of infliximab.

Anti-TNF α et tuberculose



Anti-TNF α et tuberculose

FIG. 3 Meta-analysis of incidence rates by treatment of long-term extension studies



ES: incidence rate per 100 000 patient-years; ABA: abatacept; ETA: etanercept; TOC: tocilizumab; TOF: tofacitinib; GOL: golimumab; ADA: adalimumab; IFX: infliximab; CZP: certolizumab; UST: ustekinumab; RIT: rituximab.

Anti-TNF α et tuberculose

Bon usage

Recommandations nationales

Prévention et prise en charge des tuberculoses survenant sous anti-TNF α

Juillet 2005

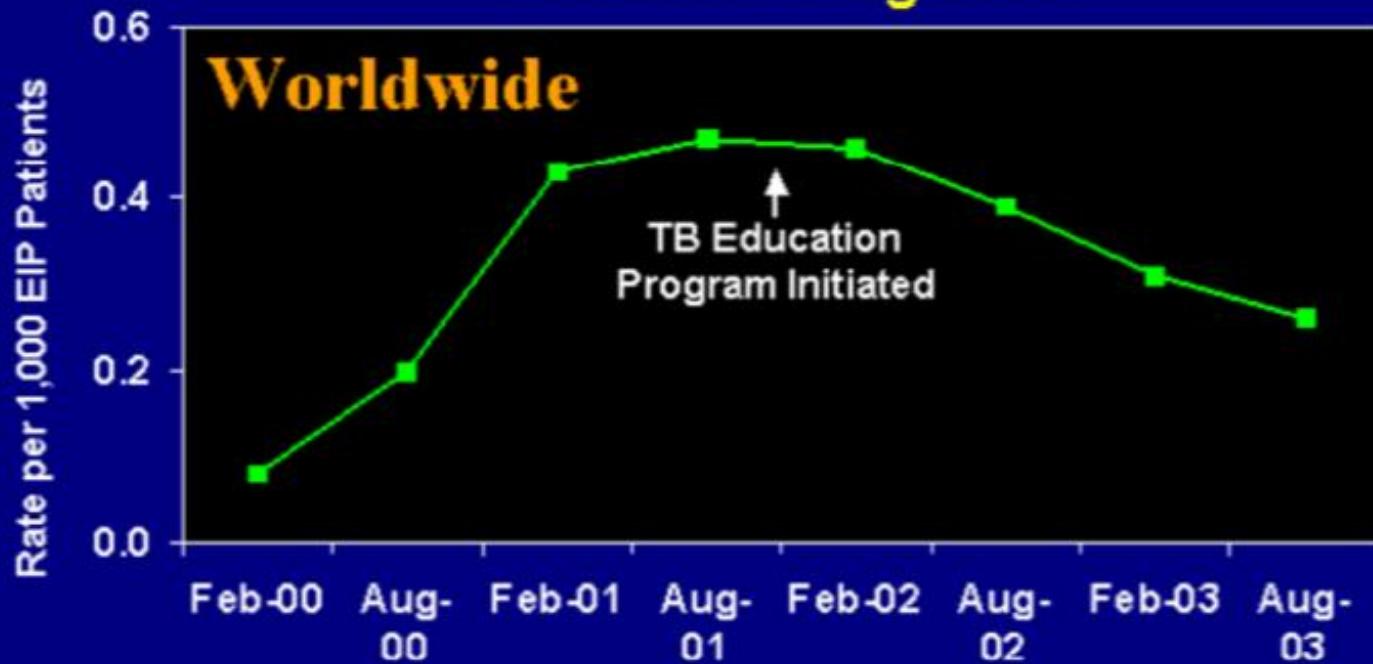
Agence française
de sécurité sanitaire
des produits de santé



Infliximab Safety Update: Tuberculosis

Reporting Rate per 1,000 Patients Exposed-in-Period (EIP)

Feb 2000 - Aug 2003



Il n'y a pas que la tuberculose...

Il n'y a pas que la tuberculose...



CHEST

Original Research

CHEST INFECTIONS

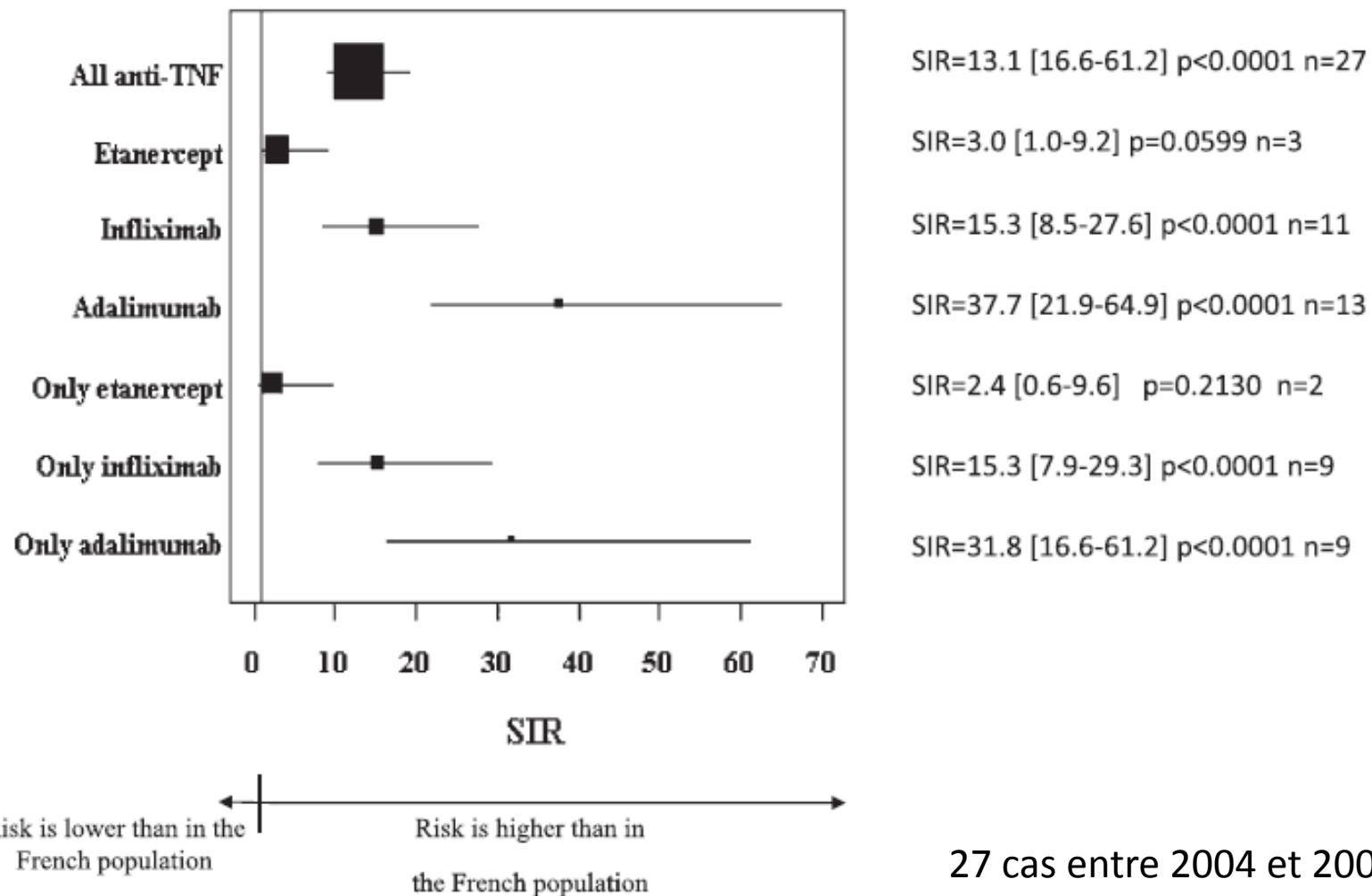
Incidence and Risk Factors of *Legionella pneumophila* Pneumonia During Anti-Tumor Necrosis Factor Therapy

A Prospective French Study

Fanny Lanternier, MD; Florence Tubach, MD, PhD; Philippe Ravaud, MD, PhD;
Dominique Salmon, MD, PhD; Pierre Dellamonica, MD, PhD; Stephane Bretagne, MD, PhD;
Marie Couret, MD; Beatrice Bouvard, MD; Michel Debandt, MD; Isabelle Gueit, MD;
Jean-Pierre Gendre, MD; Jean Leone, MD; Nathalie Nicolas, MD; Dider Che, PharmD, MPH;
Xavier Mariette, MD, PhD; and Olivier Lortholary, MD, PhD; for the Research Axed on
Tolerance of Biotherapies Group*

2013

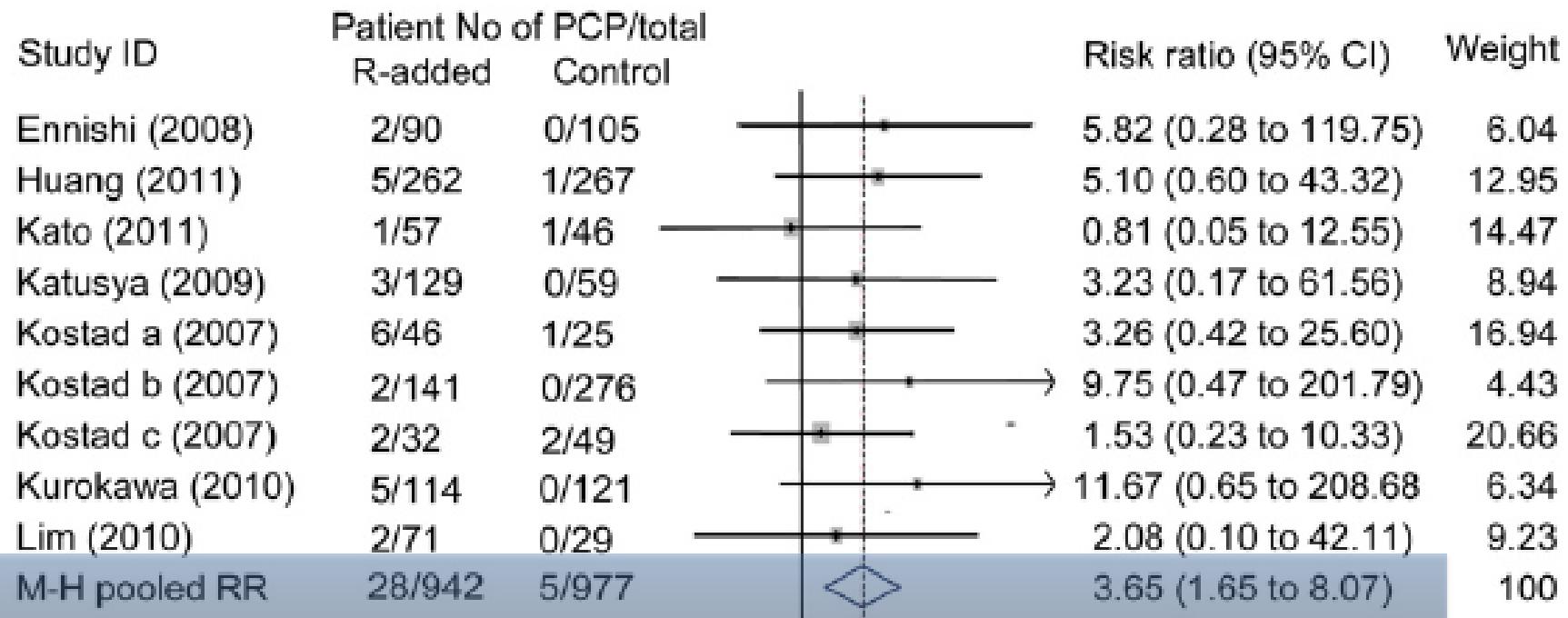
Anti-TNF α et légionelle



Il n'y a pas que les anti-TNFα...

Rituximab et pneumocystose

Risque de pneumocystose chez des patients atteints de lymphome



Heterogeneity $\chi^2 = 3.32$, $P = 0.913$

Test for RR: $z = 3.20$, $P = 0.001$



Rituximab et pneumocystose

Rituximab versus Azathioprine for Maintenance in ANCA-Associated Vasculitis

Guillemin, NEJM 2014

Table 2. Severe Adverse Events According to Treatment Group.*

Severe Adverse Event	Azathioprine Group (N=58)	Rituximab Group (N=57)
no. of events		
Infection	8	11
Bronchitis	0	3
Tuberculosis	0	1
Pneumonia with respiratory distress	1	2
<i>Pneumocystis jiroveci</i> pneumonia	0	1
Bacterial endocarditis	1	0
Atypical mycobacterial infection	1	0
Prostatitis	1	0
Herpes zoster infection	1	1
Cholecystitis	1†	0
Septicemia	1‡	0
Esophageal candidiasis	0	1
Infectious diarrhea	1§	2¶
Cancer	2	1
Pancreas	1‡	0
Prostate	0	1
Basocellular carcinoma	1	0
Hematologic event	9	1
Anemia	1	0
Leukopenia	6	0
Lymphopenia	1	1
Thrombocytopenia	1	0
Other	25	26



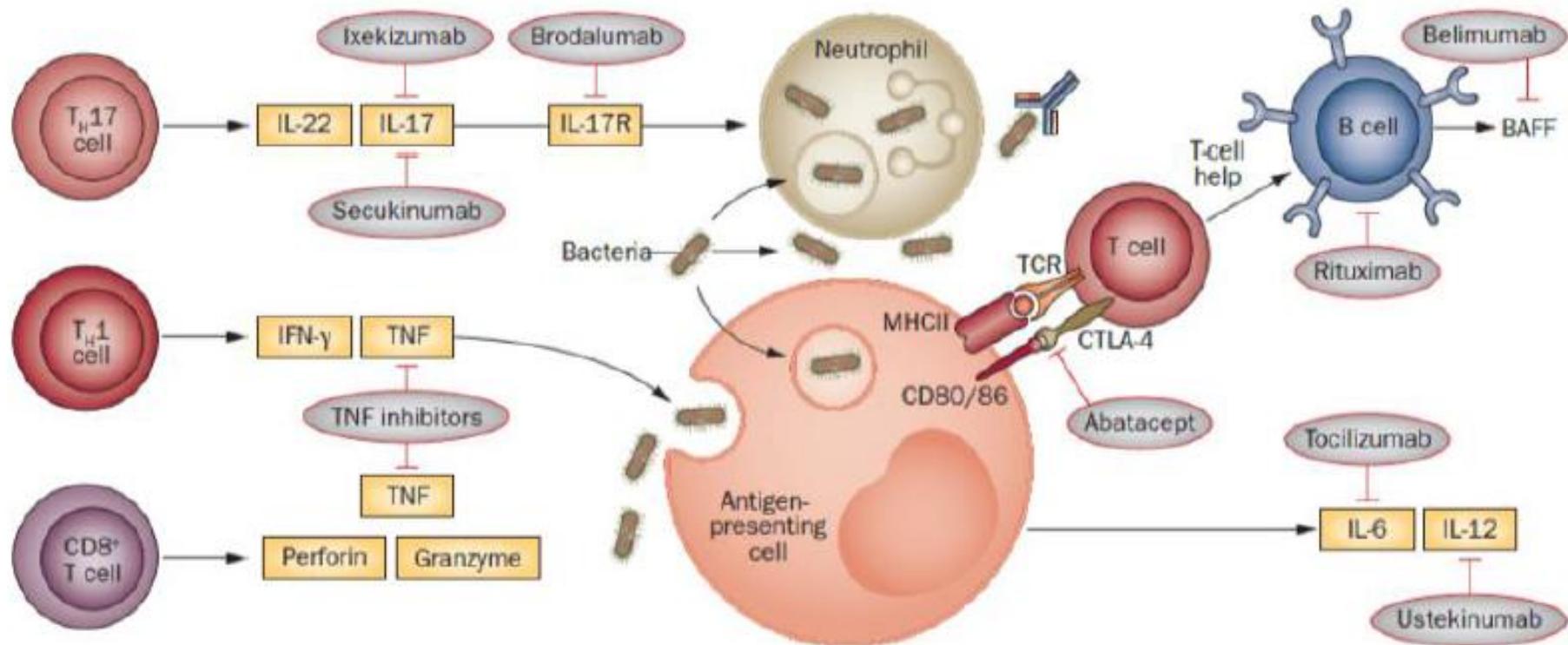
Rituximab et pneumocystose

Clin Rheumatol. 2013 Nov;32(11):1677-81. doi: 10.1007/s10067-013-2293-4. Epub 2013 Jun 11.

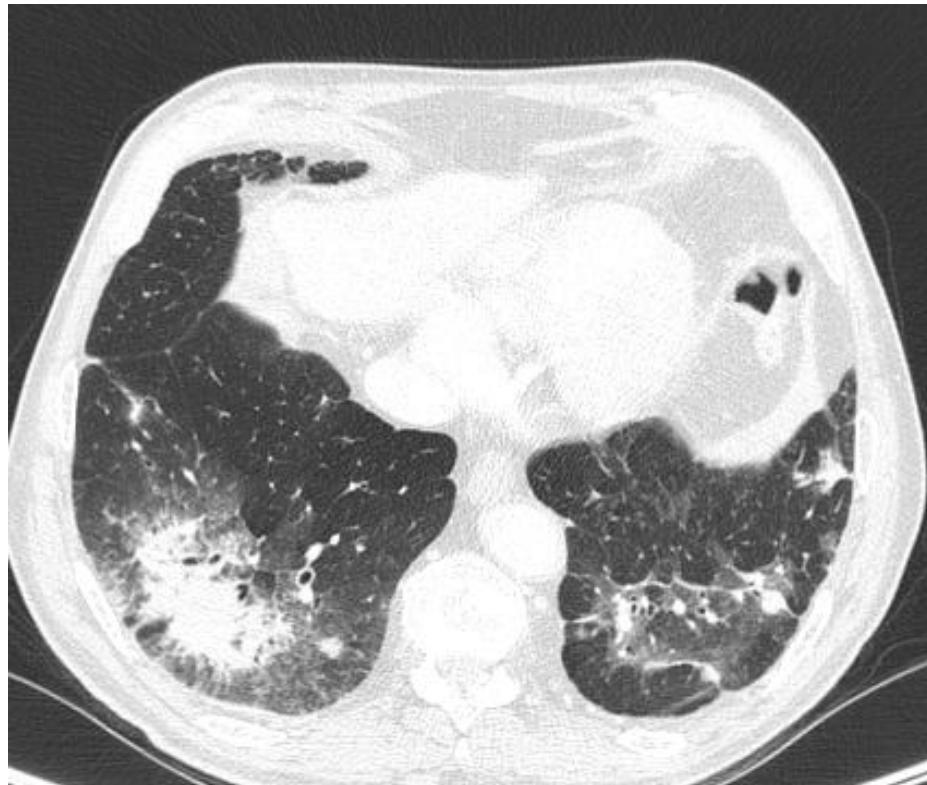
Should *Pneumocystis jiroveci* prophylaxis be recommended with Rituximab treatment in ANCA-associated vasculitis?

Besada E¹, Nossent JC.

Il n'y a pas que l'infectieux...



PID médicamenteuse



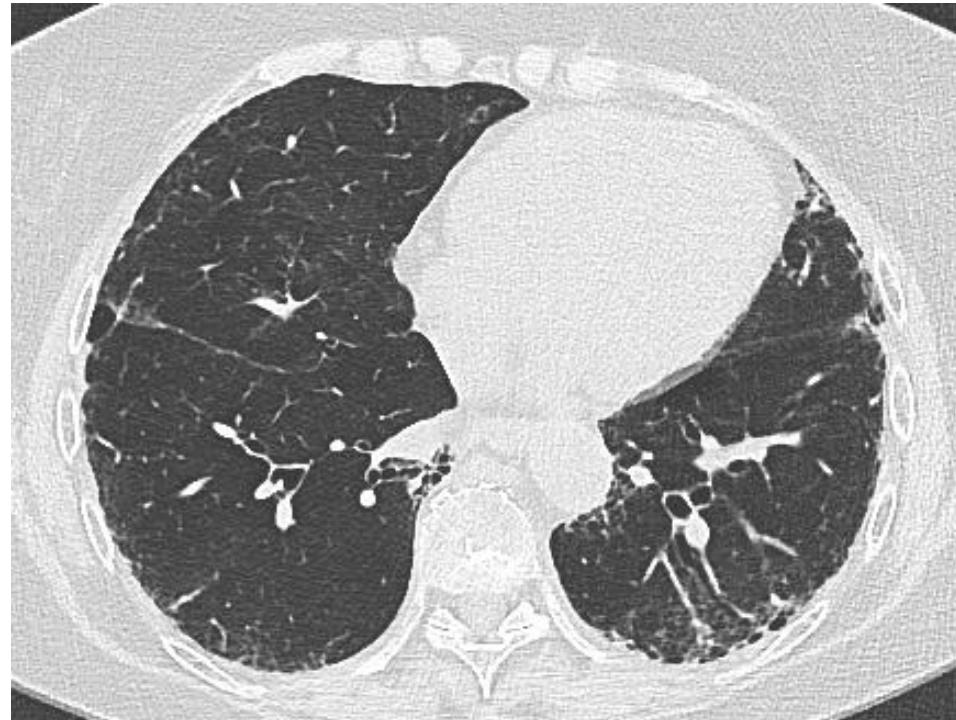
PO au pembrolizumab

www.Pneumotox.fr

PID liée à la maladie causale



Bronchiolite sur LLC

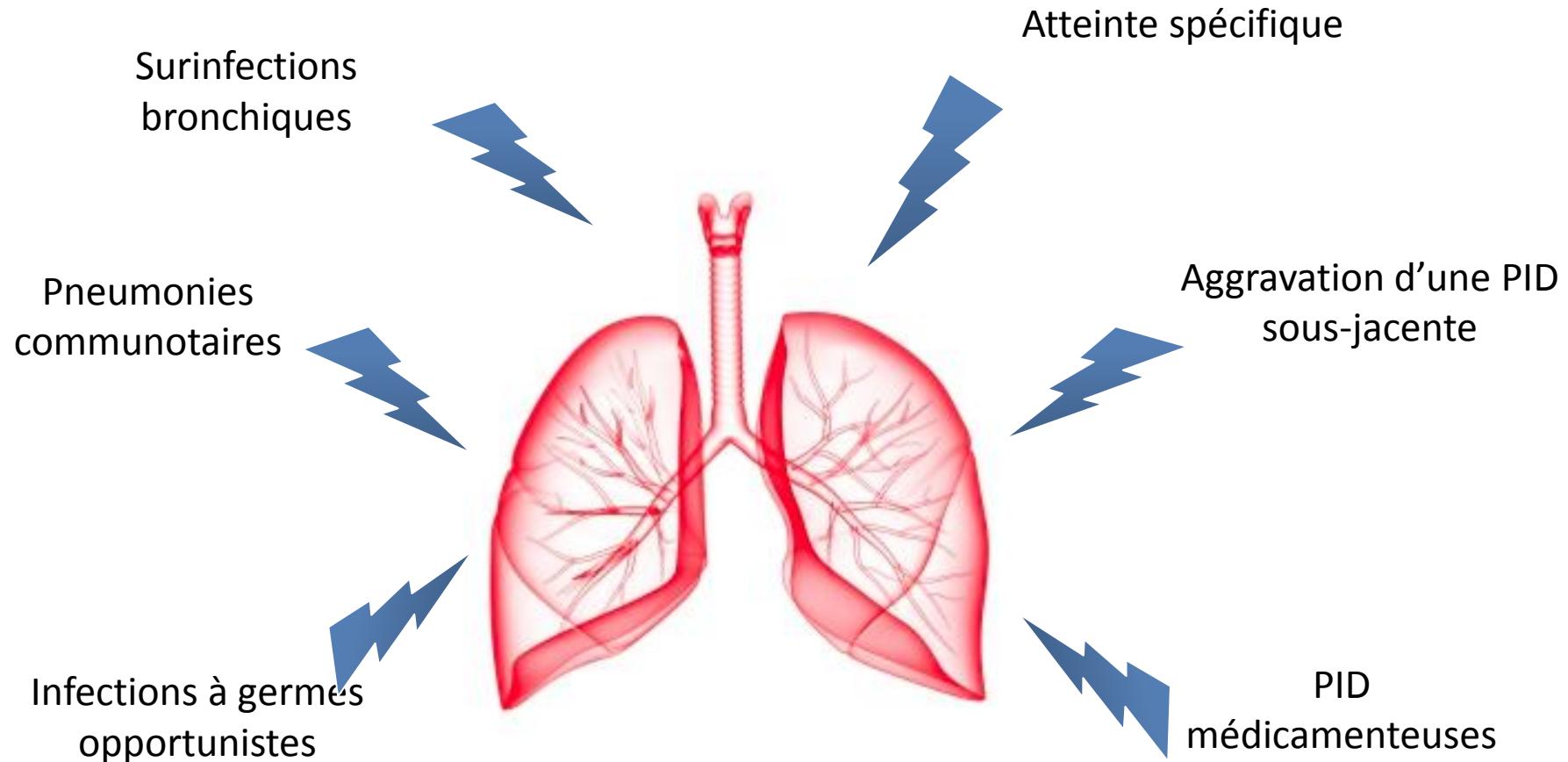


PINS sur PR

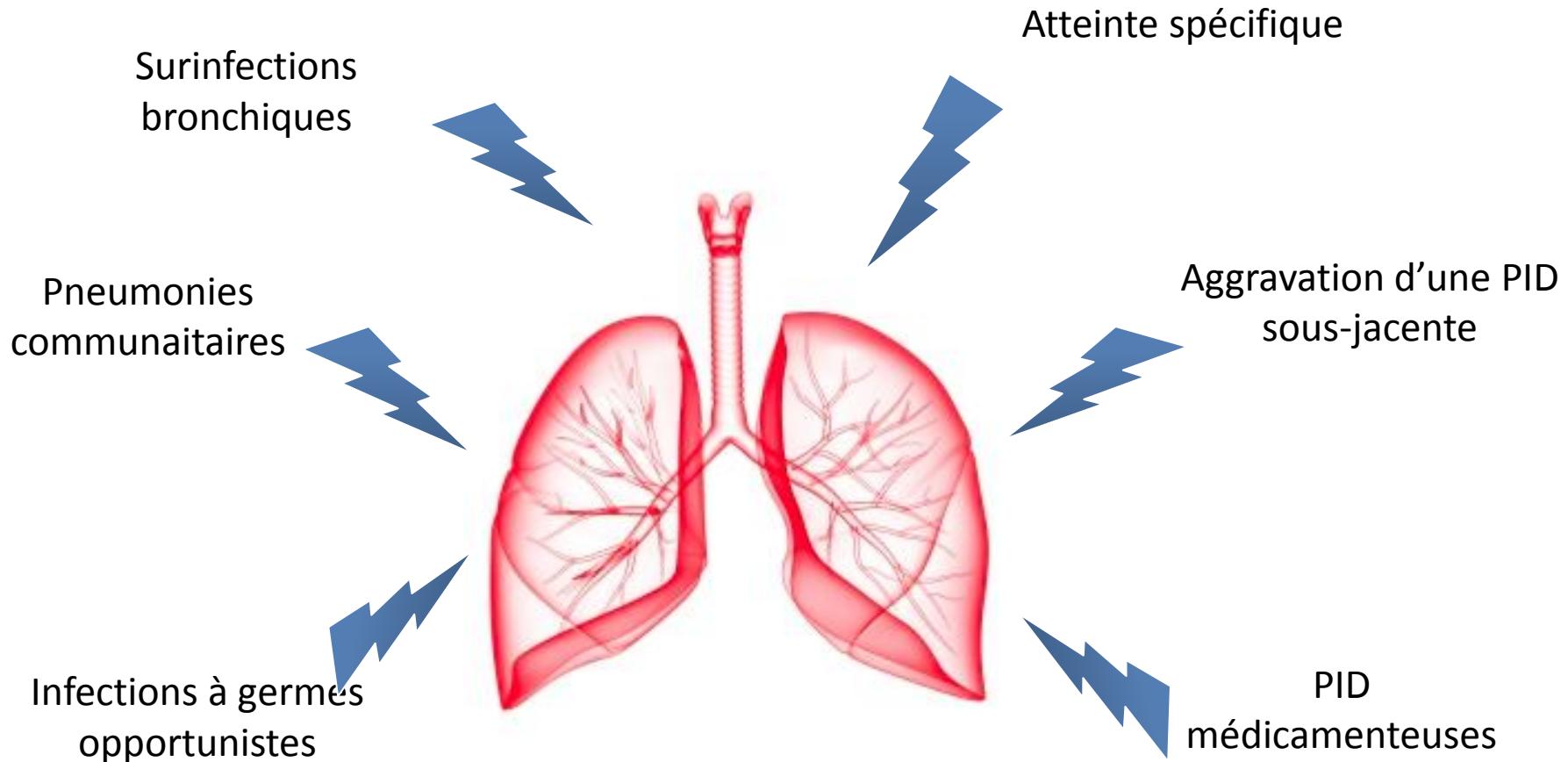
En conclusion



En conclusion



En conclusion



La pneumologie à de beaux jours devant elle!

Mod Rheumatol. 2012 Feb;22(1):122-7. doi: 10.1007/s10165-011-0488-6. Epub 2011 Jul 8.

Incidence of serious respiratory infections in patients with rheumatoid arthritis treated with tocilizumab.

Hoshi D¹, Nakajima A, Inoue E, Shidara K, Sato E, Kitahama M, Seto Y, Tanaka E, Urano W, Ichikawa N, Koseki Y, Momohara S, Taniguchi A, Nishimoto N, Yamanaka H.

Author information

Abstract

We aimed to demonstrate the incidence of serious respiratory infections in patients with rheumatoid arthritis (RA) treated with tocilizumab (TCZ) monotherapy. We analyzed the incidence of serious respiratory infections in 601 RA patients enrolled in TCZ clinical trials and their extension studies (TCZ cohort) and in 601 age- and sex-standardized RA patients treated in daily clinical practice at Tokyo Women's Medical University (IORRA subsample cohort). The rates of serious respiratory infections were 1.77 per 100 patient-years from 1999 to 2008 in the TCZ cohort and 0.53 per 100 patient-years from 2000 to 2009 in the IORRA subsample cohort. With the IORRA subsample cohort regarded as a standard population, the standardized incidence ratio (SIR) of serious respiratory infection in the TCZ cohort was 3.64 [95% confidence interval (CI) 2.56-5.01], standardized for age and sex; 2.35 (95% CI 1.66-3.24), standardized for age sex, and corticosteroid use; 1.85 (95% CI 1.30-2.55), standardized for age sex, and pre-existing pulmonary involvement; and 2.41 (95% CI 1.68-3.34) standardized for age sex, and disease activity. The risk of serious respiratory infection in the TCZ cohort was approximately double that in the IORRA subsample cohort after standardizing for corticosteroid use, pre-existing pulmonary involvement, or disease activity. This is comparable to the risk reported when tumor necrosis factor (TNF) inhibitors are used

- + PO 1 cas (Internal Medecine 2011)
- + progression d'une PID pre-existante 2 cas
(Rheumatol Intern 2012)
- + granulomatose sarcoidose like (J Rheumatol 2013)

[Clin Rheumatol.](#) 2013 Nov;32(11):1677-81. doi: 10.1007/s10067-013-2293-4. Epub 2013 Jun 11.

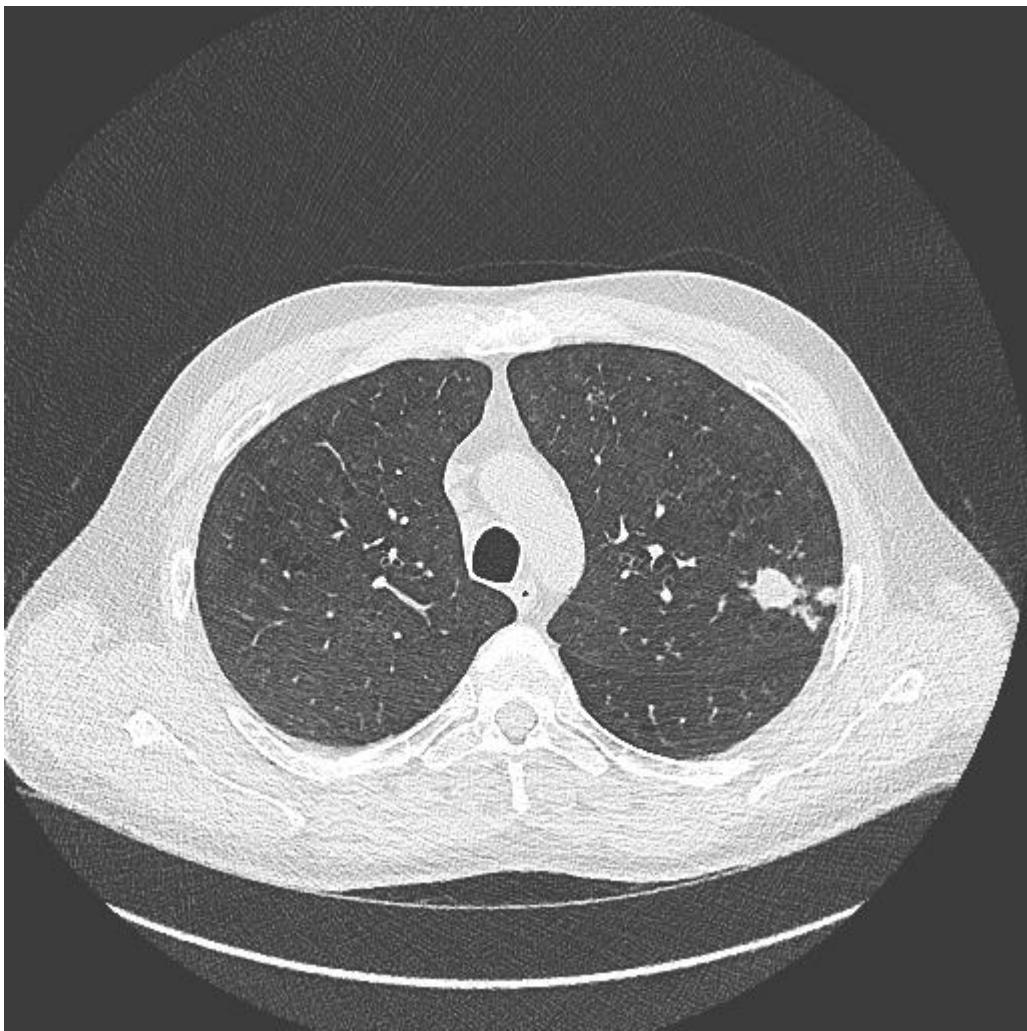
Should *Pneumocystis jiroveci* prophylaxis be recommended with Rituximab treatment in ANCA-associated vasculitis?

[Besada E¹](#), [Nossent JC](#).

Author information

Abstract

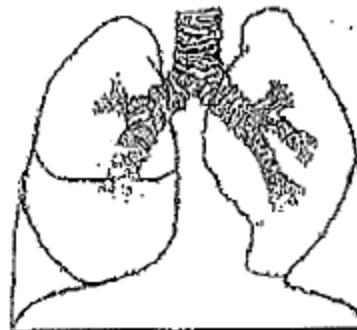
Reports in haematology, transplantation medicine and rheumatology indicate that Rituximab, a B cell depleting therapy, increases the risk for *Pneumocystis jiroveci* pneumopathy. Patients with antineutrophil cytoplasmic antibodies (ANCA)-associated vasculitis have an increased incidence of *P. jiroveci* pneumopathy compared to other autoimmune diseases and Rituximab is often used to induce and maintain remission. Herein, we present a case of a patient with granulomatosis with polyangiitis treated with Rituximab for relapse that developed *P. jiroveci* pneumopathy 3 months after and we review the relevant literature to assess *P. jiroveci* pneumopathy incidence and risks factors under Rituximab. We also discuss whether *P. jiroveci* screening before Rituximab and *P. jiroveci* pneumopathy prophylaxis under Rituximab are indicated. *P. jiroveci* colonisation is found in 25 % of patients with autoimmune diseases. However, the association between colonisation and *P. jiroveci* pneumopathy development is not very strong. *P. jiroveci* pneumopathy incidence in ANCA-associated vasculitis patients treated with Rituximab is found to be 1.2 %. Therefore, evidence and practice do not support the use of *P. jiroveci* pneumopathy chemoprophylaxis in all ANCA-associated vasculitis patients receiving Rituximab. CD4 cell count cut-off does not work well in patients treated with Rituximab as it does not reflect T cell impairment following B cell depletion. To help stratify the risk of both colonisation and *P. jiroveci* pneumopathy development, assessment of the patient's net state of immunodeficiency before administering Rituximab-including age, renal or lunginvolvement, previous infections due to T cell dysfunction, blood tests (lymphocytopenia, low CD4 cell count) and concomitant therapy-is warranted



UF 1440 Poste 39152

- Autofluorescence patient à risque
- Recherche de tumeur bronchique
- Surveillance post-chimio-radiothérapie
- Surveillance post-chir
→ intervention chirurgicale réalisée :

Prélèvements Filo - LBA
 Thérapeutique



DETAIL DU MOTEUR

- Toux depuis 3 semaines très grasse : suspicion BIC
- Patient enfin pris RCT sous immunomodulateurs (Vedo/~~MUREL~~)
- Aujourd'hui 2 lignes d'ABT par son HT (échec)
- RCT \perp : pas moyen.

FACTEURS DE RISQUE :

- IRC - dyspnée - Asthme - BPCO : Jofadre spirométrie
- Antécédents cardiaques et/ou coronarien connus :
- Traitement anticoagulant (pas de biopsies)
- Plavix - Ticlid (pas de biopsies sauf si arrêt depuis 10 jours)
- Aspirine
- anti-arythmiques/β-bloquants :

↳ vedolizumab

↳ Enteg

