



Patterns of index biologic drug registrations to a pharmacovigilance register of psoriasis patients.

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BACKGROUND

- The introduction of biologic therapies revolutionised treatment of psoriasis and psoriatic arthritis (PsA)
- Recommendations for treatment of psoriasis (Figure 1 and Table 1) and PsA (Table 2) with biologics revised over time.

Figure 1: Timeline of biologic and biosimilar authorisation, and quideline publications



British Association of Dermatologists Biologics Intervention Register, BADBIR; British Association of Dermatologists, BAD; National Institute for Health and Care Excellence, NICE; technology appraisal guidance, TA; Scottish Intercollegiate Guidelines Network, SIGN; clinical guideline, CG; European Medicines Agency, EMA.

Table 1: Guidelines for treatment of psoriasis with biologics

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Guidelines		Recommendations (PASI≥10 & DLQI>10 unless specified)		
BAD	Smith et al. 2005 1	Enbrel first line; Remicade for rapid control; Raptiva for latent TB		
	Smith et al. 2009 2	Enbrel, Humira & Remicade recommended; Stelara if anti-TNF failed		
SIGN 121, 2010 ³		Humira, Enbrel & Stelara recommended Remicade for rapid control (PASI≥20 & DLQI>18)		
NICE	TA103, 2006 ⁴	Enbrel & Raptiva recommended		
	CG153, 2012 ⁵	Humira, Enbrel & Stelara recommended Remicade for rapid control (PASI≥20 & DLQI>18)		

Psoriasis Area Severity Index, PASI; Dermatology Quality of Life Index, DLQI; tuberculosis, TB; tumour necrosis factor, TNF.

Table 2: Guidelines for treatment of PsA with biologics

Guidelines		Recommendations
SIGN 121, 2010 ³		Humira, Enbrel & Stelara recommended
NICE	TA199, 2010 ⁶	Humira, Enbrel & Stelara recommended
	TA340, 2015 ⁷	Stelara recommended

- BADBIR is a prospective, observational, web-based pharmacovigilance cohort of psoriasis patients recruited from 153 dermatology centres in the UK and Republic of Ireland (ROI).
- The aim of the registry is to explore the long-term safety of biologic agents compared to conventional systemic agents.

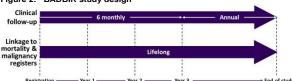
OBJECTIVES

To describe patterns of index biologic registrations for biologic-naïve psoriasis patients in BADBIR by:

- country (England; Northern Ireland (NI); ROI; Scotland; Wales);
- (ii) comorbid PsA.

METHODS

Figure 2: BADBIR study design



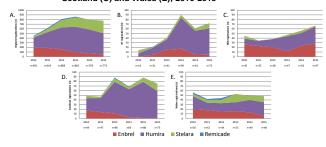
Inclusion: registration to biologic cohort before 01/01/2016 (n=7495);

Exclusion: prior biologic exposure (n=1345);

Outcomes: country of registration; prevalent PsA.

- 6140 biologic-naïve patients (82% biologic cohort); median age 45 years, inter-quartile range 36-54 years; 60% male
- Registrations by country: England (n=4697; 76%); NI (n=299; 5%); ROI (n=289; 5%); Scotland (n=525; 9%); Wales (n=330; 5%).
- Humira (57%) was the most common index biologic (23% Enbrel; 18% Stelara: 2% Remicade).

Figure 3: Index biologic registrations for England (A), NI (B), ROI (C), Scotland (C) and Wales (E): 2010-2015



PsA prevalence at baseline was 18%. Of those with PsA, 62% were commenced on Humira (25% Enbrel; 10% Stelara; 3% Remicade).

Figure 4: Index biologic registrations by PsA



CONCLUSION

- Registrations to BADBIR reflect index biologic prescribing practices in biologic-naïve psoriasis patients.
- Humira was the most commonly prescribed index biologic drug across
- First line Enbrel prescribing decreased and Stelara increased over time in the UK; however, Enbrel use was common in ROI, with few index registrations of Stelara.
- Future work will explore which baseline factors influence index biologic therapy prescribing practices.

REFERENCES

- 1. Smith C, Anstey A, Barker J, et al. (2005) Br J Dermatol. 153:486-497.
- 2. Smith C, Anstey A, Barker J, et al. (2009) Br J Dermatol; 161(5):987-1019.
- 3. SIGN (2010) SIGN 121.
- 4. NICE (2006) Technology Appraisal Guidance TA103.
- 5. NICE (2012) Clinical Guideline CG153.
- 6. NICE (2010) Technology Appraisal Guidance TA199.
- 7. NICE (2015) Technology Appraisal Guidance TA340.

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