



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

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

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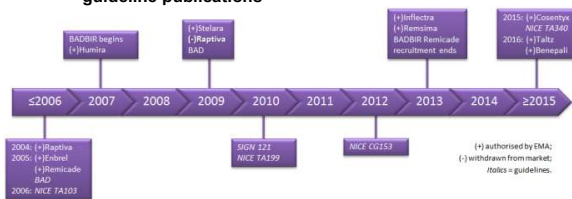
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## BACKGROUND

- 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 guideline 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**

Guidelines	Recommendations (PASI≥10 & DLQI>10 unless specified)	
BAD	Smith et al. 2005 <sup>1</sup> Smith et al. 2009 <sup>2</sup>	Enbrel first line; Remicade for rapid control; Raptiva for latent TB Enbrel, Humira & Remicade recommended; Stelara if anti-TNF failed
SIGN	SIGN 121, 2010 <sup>3</sup>	Humira, Enbrel & Stelara recommended Remicade for rapid control (PASI≥20 & DLQI>18)
NICE	TA103, 2006 <sup>4</sup> CG153, 2012 <sup>5</sup>	Enbrel & Raptiva recommended 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 <sup>3</sup>	Humira, Enbrel & Stelara recommended
NICE TA199, 2010 <sup>6</sup>	Humira, Enbrel & Stelara recommended
TA340, 2015 <sup>7</sup>	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);
- comorbid PsA.

## METHODS

**Figure 2: BADBIR study design**



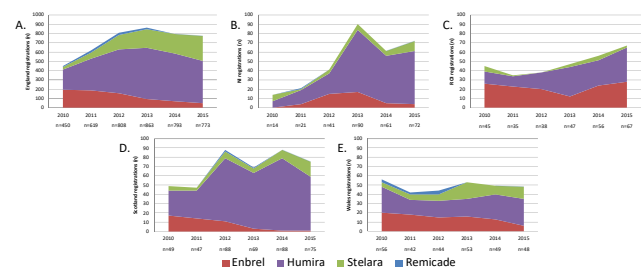
**Inclusion:** registration to biologic cohort before 01/01/2016 (n=7495);  
**Exclusion:** prior biologic exposure (n=1345);  
**Outcomes:** country of registration; prevalent PsA.

**Disclosures:** BADBIR is coordinated by the University of Manchester. BADBIR is funded by the British Association of Dermatologists (BAD). The BAD receives income from AbbVie, Janssen Cilag, Novartis, Samsung Bioepis and Pfizer for providing pharmacovigilance services. This income finances a separate contract between the BAD and the University of Manchester who coordinate BADBIR. All decisions concerning analysis, interpretation, and publication are made independently of any industrial contribution. KJM received lecture fees from Janssen Cilag (Dec. 2015) and Eli Lilly (May 2016).

## RESULTS

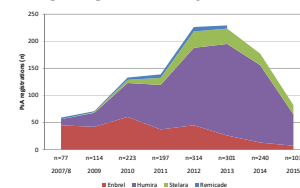
- 6140 biologic-naïve patients (82% biologic cohort); median age 45 years, inter-quartile range 36-54 years; 60% male.
- Registrations by country: England (n=4697; 76%); NI (n=299; 5%); ROI (n=289; 5%); Scotland (n=525; 9%); Wales (n=330; 5%).
- Humira (57%) was the most common index biologic (23% Enbrel;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

**Figure 3: Index biologic registrations for England (A), NI (B), ROI (C), Scotland (D) 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 the UK and ROI.
- 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

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