

26 May 2016
EMA/PRAC/313187/2016
Pharmacovigilance Risk Assessment Committee (PRAC)

PRAC recommendations on signals

Adopted at the PRAC meeting of 10-13 May 2016

This document provides an overview of the recommendations adopted by the Pharmacovigilance Risk Assessment Committee (PRAC) on the signals discussed during the meeting of 10-13 May 2016 (including the signal European Pharmacovigilance Issues Tracking Tool [EPITT]¹ reference numbers).

PRAC recommendations to provide supplementary information are directly actionable by the concerned marketing authorisation holders (MAHs). PRAC recommendations for regulatory action (e.g. amendment of the product information) are submitted to the Committee for Medicinal Products for Human Use (CHMP) for endorsement when the signal concerns Centrally Authorised Products (CAPs), and to the Co-ordination Group for Mutual Recognition and Decentralised Procedures – Human (CMDh) for information in the case of Nationally Authorised Products (NAPs). Thereafter, MAHs are expected to take action according to the PRAC recommendations.

When appropriate, the PRAC may also recommend the conduct of additional analyses by the Agency or Member States.

MAHs are reminded that in line with Article 16(3) of Regulation No (EU) 726/2004 and Article 23(3) of Directive 2001/83/EC, they shall ensure that their product information is kept up to date with the current scientific knowledge including the conclusions of the assessment and recommendations published on the European Medicines Agency (EMA) website (currently acting as the EU medicines webportal).

For CAPs, at the time of publication, PRAC recommendations for update of product information have been agreed by the CHMP at their plenary meeting (23-26 May 2016) and corresponding variations will be assessed by the CHMP.

For nationally authorised medicinal products, it is the responsibility of the National Competent Authorities (NCAs) of the Member States to oversee that PRAC recommendations on signals are adhered to.

Variations for CAPs are handled according to established EMA procedures. MAHs are referred to the available [guidance](#). Variations for NAPs (including via mutual recognition and decentralised procedures) are handled at national level in accordance with the provisions of the Member States.

¹ The relevant EPITT reference number should be used in any communication related to a signal.

The timeline recommended by PRAC for submission of variations following signal assessment is applicable to both innovator and generic medicinal products, unless otherwise specified.

For procedural aspects related to the handling of PRAC recommendations on signals (e.g. submission requirements, contact points, etc.) please refer to the [Questions and Answers on signal management](#).

1. Recommendations for update of the product information²

1.1. Natalizumab – Necrotising retinitis

| | |
|-------------------------|-----------------------------------|
| Authorisation procedure | Centralised |
| EPITT No | 18605 |
| PRAC rapporteur(s) | Brigitte Keller-Stanislawski (DE) |
| Date of adoption | 13 May 2016 |

Recommendation

Having considered the available evidence, the PRAC has agreed that the MAH for Tysabri (natalizumab) should submit a variation within 2 months, to amend the product information (PI) as described below (new text underlined). The MAH should update the relevant sections of the Risk Management Plan to include acute retinal necrosis under Herpes infections. Communication of the update of the PI should be agreed on the national basis.

Summary of Product Characteristics

Section 4.4 - Special warnings and precautions for use

Infections including other opportunistic infections

[...] If herpes encephalitis or meningitis occurs, TYSABRI should be discontinued and appropriate treatment for herpes encephalitis or meningitis should be administered.

Acute retinal necrosis (ARN) is a rare fulminant viral infection of the retina caused by the family of herpes viruses (e.g. varicella zoster). ARN has been observed in patients being administered TYSABRI and can be potentially blinding. Patients presenting with eye symptoms such as decreased visual acuity, redness and painful eye should be referred for retinal screening for ARN. Following clinical diagnosis of ARN, discontinuation of TYSABRI should be considered in these patients.

Section 4.8 - Undesirable effects

Infections, including PML and opportunistic infections

[...] The duration of treatment with TYSABRI prior to onset ranged from a few months to several years (see section 4.4).

In post-marketing experience, rare cases of acute retinal necrosis (ARN) have been observed in patients receiving TYSABRI. Some cases have occurred in patients with central nervous system (CNS) herpes infections (e.g. herpes meningitis and encephalitis). Serious cases of ARN, either affecting one or both eyes, led to blindness in some patients. The treatment reported in these cases included anti-viral therapy and in some cases, surgery (see section 4.4).

² Translations in all official EU languages of the new product information adopted by PRAC are also available to MAHs on the EMA website.

Package Leaflet

4. Possible side effects

Like all medicines, this medicine can cause side effects, although not everybody gets them.

Speak to your doctor or nurse immediately if you notice any of the following

Symptoms of serious infections including:

- An unexplained fever
- Severe diarrhoea

[...]

- Impaired vision
- Pain or redness of the eye(s)

1.2. Warfarin – Calciphylaxis

| | |
|-------------------------|------------------------|
| Authorisation procedure | Non-centralised |
| EPITT No | 18545 |
| PRAC rapporteur(s) | Torbjörn Callreus (DK) |
| Date of adoption | 13 May 2016 |

Recommendation

Having considered the available evidence from EudraVigilance, the literature, the analysis submitted by Takeda and Bristol-Myers Squibb, as well as the existence of a plausible biological mechanism, the PRAC has concluded that there is a reasonable possibility of a causal relationship between calciphylaxis and the use of warfarin. The PRAC has agreed that the MAH(s) of warfarin-containing medicinal products should submit a variation within 3 months, to amend the product information as described below (new text underlined):

Summary of Product Characteristics

Section 4.4 - Special warnings and precautions for use

Calciphylaxis is a rare syndrome of vascular calcification with cutaneous necrosis, associated with high mortality. The condition is mainly observed in patients with end-stage renal disease on dialysis or in patients with known risk factors such as protein C or S deficiency, hyperphosphataemia, hypercalcaemia or hypoalbuminaemia. Rare cases of calciphylaxis have been reported in patients taking warfarin, also in the absence of renal disease. In case calciphylaxis is diagnosed, appropriate treatment should be started and consideration should be given to stopping treatment with warfarin.

Section 4.8 - Undesirable effects

Skin and subcutaneous tissue disorders

Frequency 'not known': Calciphylaxis

Package Leaflet:

4. Possible side effects

Tell your doctor straight away if you have any of the following side effects...:

[...]

A painful skin rash. On rare occasions warfarin can cause serious skin conditions, including one called calciphylaxis that can start with a painful skin rash but can lead to other serious complications. This adverse reaction occurs more frequently in patients with chronic kidney disease.

2. Recommendations for submission of supplementary information

| INN | Signal (EPITT No) | PRAC Rapporteur | Action for MAH | MAH |
|--|--|---|---|--|
| Anakinra; canakinumab | Weight increased (18641) | Brigitte Keller- Stanislawski (DE) | Supplementary information requested (submission by 27 July 2016) | Swedish Orphan Biovitrum AB (publ); Novartis Europharm Ltd |
| Dexlansoprazole; lansoprazole | Unexpected histopathological findings from a juvenile rat toxicity study (18645) | Kirsti Villikka (FI) | Supplementary information requested (submission by 27 July 2016) | Takeda |
| Fluconazole | Spontaneous abortion during pregnancy and stillbirth (18666) | Doris I. Stenver (DK) | Supplementary information requested (submission by 27 July 2016) | Pfizer |
| Fluoroquinolones (for systemic use): ciprofloxacin; enoxacin; flumequine; levofloxacin; lomefloxacin; moxifloxacin; norfloxacin; ofloxacin; pefloxacin; prulifloxacin; rufloxacin | Aortic aneurysm and dissection (18651) | Valerie Strassmann (DE) | Supplementary information requested (submission by 27 July 2016) | Angelini; Bayer; Delta; Gerda; Mediolanum; MSD; Pierre Fabre; Rottapharm; Sanofi-Aventis |

| INN | Signal (EPITT No) | PRAC Rapporteur | Action for MAH | MAH |
|----------------------------------|--|-------------------------|---|--|
| Levetiracetam (oral solution) | Medication errors associated with accidental overdoses (10519) | Veerle Verlinden (BE) | Supplementary information requested (submission by 24 August 2016) | UCB Pharma S.A. |
| Metronidazole | Severe hepatic and neurologic toxicity in patients with Cockayne syndrome (18663) | Martin Huber (DE) | Supplementary information requested (submission by 27 July 2016) | Sanofi-Aventis; Dr. August Wolff |
| Quinine | Increased mortality risk in heart failure patients with/without concomitant use of beta-blockers (18529) | Almath Spooner (IE) | Assess in the next PSUR (submission as per EURD list) | Actavis UK Ltd; Alept; Artecef BV; Athlone Laboratories Ltd; Bristol Laboratories Ltd; Casella-Med Gmbh & Co.KG; Dalkeith Laboratories Ltd; Laboratoire Innotech International |
| Regorafenib | Angioedema (18656) | Sabine Straus (NL) | Supplementary information requested (submission by 27 July 2016) | Bayer Pharma AG |
| Vedolizumab | Hepatotoxicity (18646) | Adam Przybylkowski (PL) | Assess in the ongoing PSUSA procedure EMEA/H/C/PSUSA/0001 0186/201511 | Takeda Pharma A/S |

3. Other recommendations

| INN | Signal (EPITT No) | PRAC Rapporteur | Action for MAH | MAH |
|------------|----------------------------|--------------------------|---------------------------|---------------------------------------|
| Adalimumab | Glomerulonephritis (18528) | Ulla Wändel Liminga (SE) | Routine pharmacovigilance | AbbVie Ltd |
| Clozapine | Myocarditis (18414) | Julie Williams (UK) | Routine pharmacovigilance | MAHs of clozapine containing products |

| INN | Signal (EPITT No) | PRAC Rapporteur | Action for MAH | MAH |
|--|---|--------------------------|---------------------------|--|
| Cytarabine | Benign intracranial hypertension (18533) | Rafe Suvarna (UK) | Routine pharmacovigilance | Pacira Ltd |
| Dapagliflozin; dapagliflozin, metformin | Pancreatitis (18558) | Qun-Ying Yue (SE) | Monitor in PSUR | AstraZeneca AB |
| Fluoroquinolones (for systemic use): ciprofloxacin; enoxacin; flumequine; levofloxacin; lomefloxacin; moxifloxacin; norfloxacin; ofloxacin; pefloxacin; prulifloxacin; rufloxacin | Retinal detachment (15914) | Valerie Strassmann (DE) | Routine pharmacovigilance | MAHs of fluoroquinolone-containing medicinal products for systemic use |
| Gefitinib | Pneumatosis intestinalis (18575) | Ulla Wändel Liminga (SE) | Routine pharmacovigilance | AstraZeneca AB |
| Infliximab | Thyroid gland disorders (18530) | Ulla Wändel Liminga (SE) | Routine pharmacovigilance | Janssen Biologics B.V. |
| Methotrexate | Congenital cardiovascular anomaly (18481) | Doris I. Stenver (DK) | Routine pharmacovigilance | MAHs of methotrexate containing products |
| Selective serotonin reuptake inhibitors (SSRIs): citalopram; escitalopram; fluoxetine; fluvoxamine; mirtazapine; paroxetine; sertraline; and | Risk of autism spectrum disorders (ASD) after maternal use of SSRI/SNRI (14082) | Isabelle Robine (FR) | Routine pharmacovigilance | Lundbeck; Eli Lilly; Abbott; GlaxoSmithKline; Organon; Pfizer |

| INN | Signal (EPITT No) | PRAC Rapporteur | Action for MAH | MAH |
|---|-------------------|--------------------|----------------|-----|
| Serotonin– noradrenaline reuptake inhibitors (SNRIs): duloxetine; sibutramine; venlafaxine | | | | |