



SAFETY: A KEY FACTOR WHEN CHOOSING A BIOLOGIC FOR YOUR PSA PATIENT



TREMFYA[®], is indicated for the treatment of moderate to severe plaque psoriasis in adults who are candidates for systemic therapy¹. TREMFYA[®] is indicated in the treatment of active psoriatic arthritis in adult patients, alone or in combination with methotrexate, who have had an inadequate response or have been intolerant to a prior disease-modifying antirheumatic drug (DMARD) therapy¹.

CP-332648, TREM-CRO-PPT-054-30/09/2022 SEPTEMBER 2022

RATIONALE OF THIS DOCUMENT

The purpose of this piece is to outline the following for each class of biologic treating PsA:

- Special warnings and precautions for use as per Section 4.4 of the SmPC.
- Patient groups for whom the product is contraindicated, or for whom caution is advised.

- ✓ Main safety risks for each drug class were selected from **section 4.4 of the SmPC (Special warnings and precautions for use)**. Risks qualified as “rare” or “isolated” were still included if they had a dedicated sub-section in section 4.4.
- ✓ For the section “**to avoid in patients with**”, **section 4.3 (Contraindications) of the SmPC** was evaluated.
- ✓ For the section “**to be used with caution in patients with**”, **sections 4.4 of the SmPC** was evaluated.
- ✓ Only risks, contraindications, special warnings and precautions **common to all drug SmPCs** within the class were included. If these differed between drugs of the same class, **these were specified in the footnotes**.
- ✓ An exception was permitted **when all drugs except one within the class** included the same risk, contraindication, special warning or precaution; a footnote was added for the exception.
- ✓ For drug classes **with only two biologics treating PsA**, any risk, contraindication, special warning and precaution mentioned in one but not the other drug SmPC was not included in the main text, and only specified in the footnotes.
- ✓ **Recommendations for discontinuations were not included** as only recommendations/ contraindications prior to initiation were of interest in this piece.

PsA: Psoriatic Arthritis; SmPC: Summary of Product Characteristics.



WHAT IMPACT DO TREATMENT-RELATED ADVERSE EVENTS HAVE ON PATIENTS?

They are a source of worry for patients

Around 40% of patients worry about the side effects of their biologics²

They are a key reason why patients discontinue /switch their biologic

Up to 50% of patients discontinue or switch their TNFi due to adverse events³⁻⁴

THE CHOICE OF AN EFFECTIVE AND WELL-TOLERATED BIOLOGIC WITH A CONSISTENT SAFETY PROFILE IS KEY TO HELP ENSURE PATIENT PEACE OF MIND AND TREATMENT DURABILITY

TNFi: Tumor Necrosis Factor Inhibitor

RATIONALE

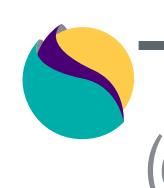
**AE
IMPACT**

MOA / RISKS OF
PSA TREATMENTS

TREMFYA®
SAFETY PROFILE

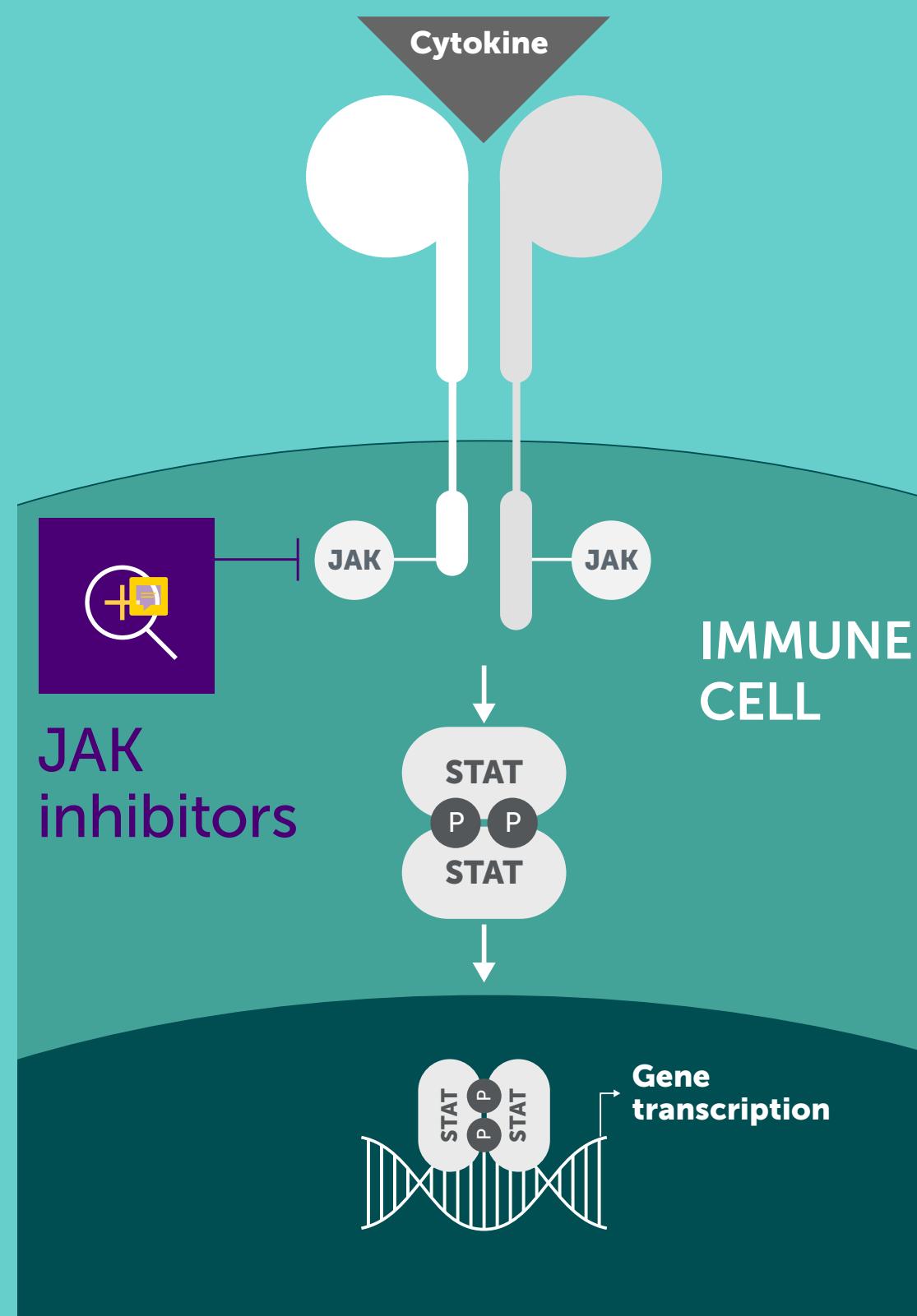
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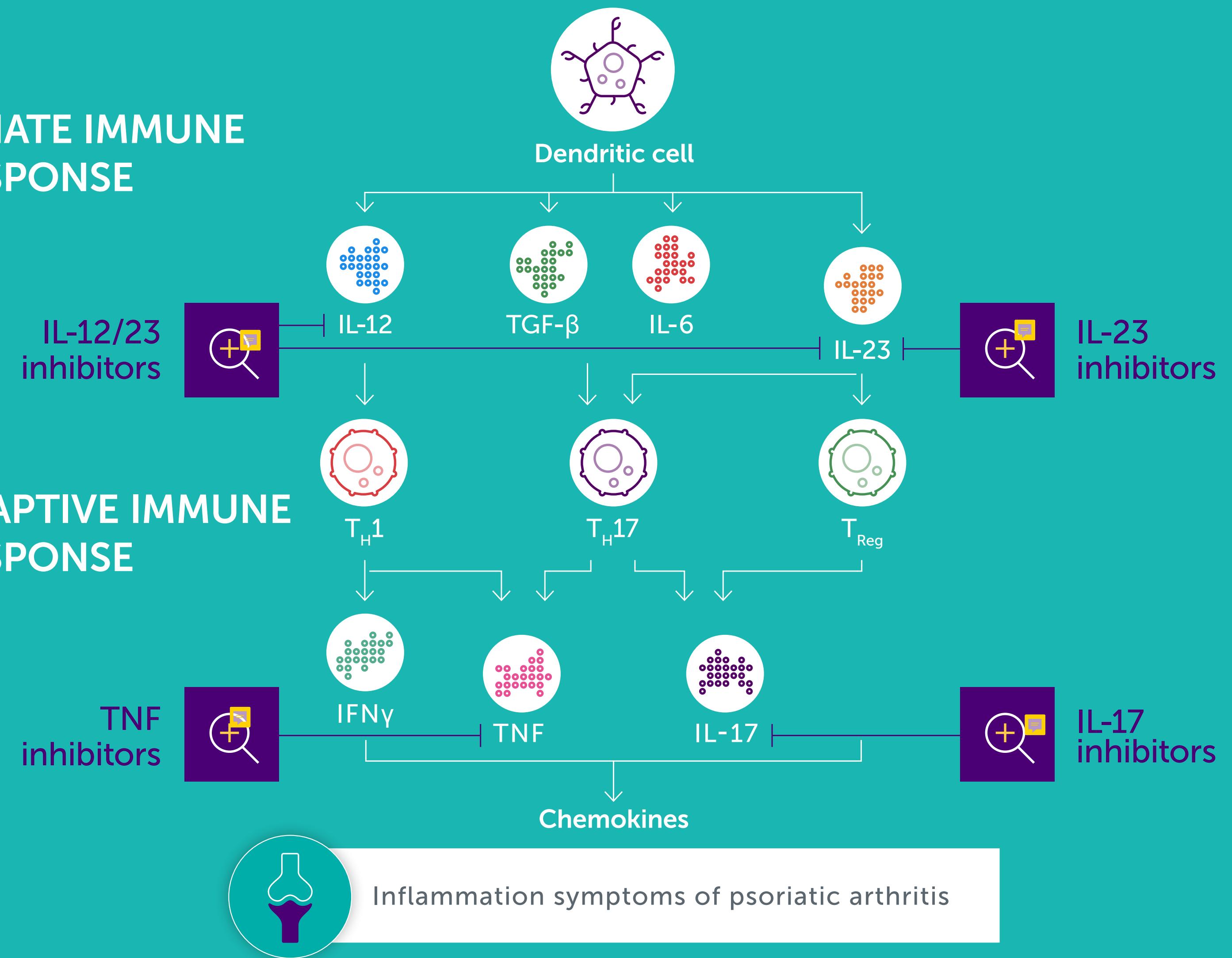
 Tremfya®
(guselkumab)

A DEEPER LOOK AT THE MOA AND MAIN SAFETY RISKS OF BIOLOGICS IN PSA

- The use of biologics in general may increase the risk of infection due to their effect on the immune system. However, each drug class and its MOA, will carry its own set of safety concerns to manage.⁵

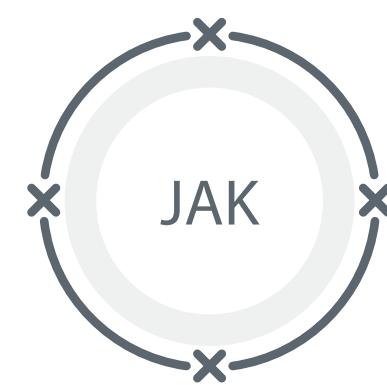


INNATE IMMUNE RESPONSE



Images adapted from Gadina et al, 2013⁶ (left) and Schinocca et al, 2021⁷ (right)

IFNy: Interferon-gamma; IL-6: Interleukin 6; IL-12: Interleukin 12; IL-17: Interleukin 17; IL-23: Interleukin 23; JAK: Janus Kinase; MOA: Mechanism of Action; PsA: Psoriatic Arthritis; STAT: Signal Transducer and Activator of Transcription; TGF-β: Transforming Growth Factor Beta; Th1: T Helper 1; Th17: T Helper 17; TNF: Tumor Necrosis Factor; Treg: Regulatory T cell.



JAK inhibitors

Mechanism of action

Inhibit the JAK/STAT pathway, necessary for the wide-ranging biological effect of >50 cytokines, and involved in **immune regulatory processes, antitumour defense, tumour initiation and progression, and cardiovascular system regulation.***⁸⁻¹⁰

Selective inhibition of specific JAK enzymes (eg JAK-1) to limit side-effects is difficult to achieve due to cross-inhibition of other JAK enzymes.⁸

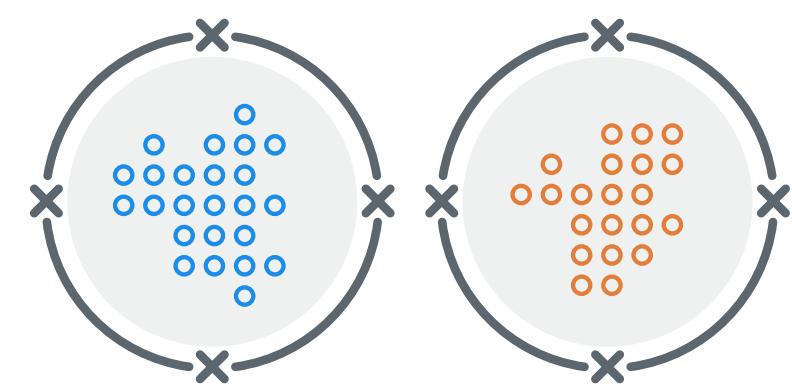
Main safety risks you should look out for: ^{†‡11,12}	To avoid in patients with ^{‡11,12}	To be used with caution in patients with ^{‡11,12}
<ul style="list-style-type: none"> Serious infections Viral reactivation, including herpes virus reactivation Serious VTE events Cardiovascular disorders Malignancies Liver enzyme elevations Haematological abnormalities Increases in lipid parameters 	<ul style="list-style-type: none"> Hypersensitivity to the active substance or to any excipients Active serious infections, including active TB Severe hepatic impairment Pregnancy and lactation 	<ul style="list-style-type: none"> Recurrent infections, exposure to TB or a history of a serious or opportunistic infection Underlying conditions that may predispose them to infection Residence or past travels in areas of endemic mycoses or tuberculosis Ages older than 65 years old Known risk factors for VTE Current or past malignancies Concomitant live vaccine use Elevated ALT or AST Low neutrophil, lymphocyte or haemoglobin counts Concomitant use with other potent immunosuppressants

ALT: Alanine Aminotransferase; AST: Aspartate Transaminase; JAK: Janus Kinase; NSAID: Non-Steroid Anti-inflammatory Drugs; STAT: Signal Transducer and Activator of Transcription; TB: Tuberculosis VTE: Venous Thromboembolism

*Please note that this list is not exhaustive

† Other safety risks specifically listed in the tofacitinib SmPC are: hypersensitivity and interstitial lung disease. Another safety risk specifically listed in the upadacitinib SmPC is diverticulitis which may cause gastrointestinal perforation. While events of gastrointestinal perforation are reported in section 4.4 of the tofacitinib SmPC, the role of tofacitinib in these events is not known.^{11,12}

‡ The tofacitinib SmPC also specified that tofacitinib should be used with caution in patients with diabetes, with cardiovascular risk factors, who are current or past smokers, with a history of lung disease, who are using biologics, and with hereditary problems of galactose intolerance, total lactase deficiency or glucose-galactose malabsorption.¹¹



IL-12/23 inhibitors

Mechanism of action

Inhibit the pro-inflammatory regulatory cytokines IL-23 and IL-12 by binding to their shared p40 protein subunit.¹³

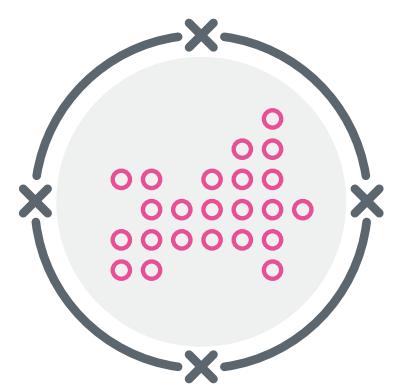
IL-23 cytokines play a role in the **differentiation, expansion and activity of pathogenic Th/Tc17 cells and the expression of multiple effector cytokines.**

IL-12 inhibitors **stimulate natural killer cells and drive the Th1 response against intracellular pathogens and tumor immune surveillance.***^{13,14}

Main safety risks you should look out for ¹⁵ :	To avoid in patients with ¹⁵ :
 Infections, including serious infections	 Clinically important active infections
 Reactivation of latent infections	 Hypersensitivity to the active substance or any excipients
 Malignancies	
 Systemic and respiratory hypersensitivity reactions	
To use with caution in patients with ¹⁵ :	
	 Current or past malignancies
	 Concomitant live vaccine use
	 Concomitant use of other immunosuppressants

IL-12: Interleukin 12; IL-12/23: Interleukin 12/23; IL-23: Interleukin 23; SmPC: Summary of Product Characteristics; Th1: T Helper 1; Th17: T Helper 17; Tc17: IL-17-producing CD8(+)T cells

*Please note that this list is not exhaustive



TNF inhibitors

Mechanism of action

Inhibit the pro-inflammatory effector cytokine TNF- α , involved in **numerous immune regulatory processes** including granuloma formation and maintenance.*¹⁶

Main safety risks you should look out for ¹⁷⁻²¹ :	To avoid in patients with ¹⁷⁻²¹ :
 Serious infections, including TB, sepsis and other opportunistic infections	 Active infections, including TB
 Reactivation of latent infections, including TB and hepatitis B [†]	 Moderate to severe heart failure (NYHA classes III/IV) [§]
 Malignancies	 Hypersensitivity to the active substance or any excipients
 Haematologic abnormalities, including cytopenia	To be used with caution in patients with¹⁷⁻²¹:
 Hypersensitivity	 Chronic infection or a history of recurrent infection, including underlying conditions that predispose to infection [¶]
 New onset of worsening of demyelinating disease	 Concomitant live vaccine use, or concomitant use with anakinra or abatacept ^{**}
 Worsening of congestive heart failure	 Pre-existing or recent onset demyelinating disorder
 Lupus-like syndrome [‡]	 Current or past malignancies, including patients with COPD or with increased risk of malignancy due to heavy smoking ^{††}

COPD: Chronic Obstructive Pulmonary Disease; DMARD: Disease-Modifying Antirheumatic Drug; NYHA: New York Heart Association; SmPC: Summary of Product Characteristics; TB: Tuberculosis; TNF- α : Tumour Necrosis Factor alpha

*Please note that this list is not exhaustive

^tWorsening of hepatitis C is also listed in section 4.4 of the etanercept SmPC. Jaundice and non-infectious hepatitis, some with features of auto-immune hepatitis, are also listed in section 4.4 of the infliximab SmPC.^{19,21}

‡Lupus-like syndrome is not listed in section 4.4 of etanercept.

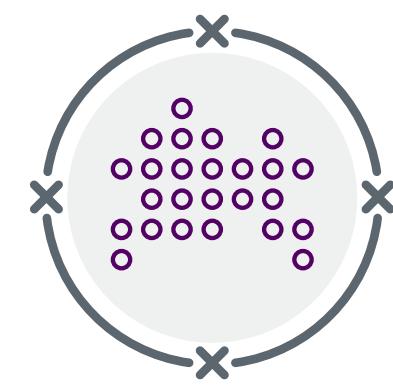
§Moderate to severe heart failure (NYHA classes III/IV) is included in section 4.3 of all TNFi SmPCs except the etanercept SmPC where only caution is advised in section 4.4. On the other hand, only the etanercept SmPC specifically lists sepsis or risk of sepsis as a contraindication in section 4.3.¹⁷⁻²¹

&Other groups of patients specifically listed in the etanercept SmPC include patients with a previous history of blood dyscrasias, with hepatitis C and who have moderate to severe alcohol hepatitis.¹⁹

¶Please note that the golimumab SmPC did not include the specification "including underlying conditions that predispose to infection".²

****Concomitant administration with other biologic DMARDs or other TNF antagonists were specifically listed in adalimumab, infliximab and golimumab SmPC.^{17,20-21}**

^{††} Please note that the etanercept SmPC did not include patients with COPD or with increased risk of malignancy due to heavy smoking.¹⁹



IL-17 inhibitors

Mechanism of action

Inhibit the pro-inflammatory effector cytokine IL-17 involved in **immune responses against fungal and bacterial infection.***

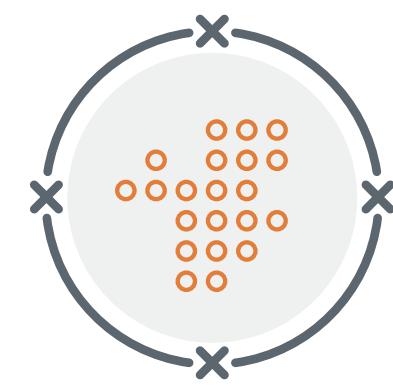
IL-17 cytokines may also have a **protective function in the intestine.**²²⁻²⁴

Main safety risks you should look out for ^{25,26} :	To avoid in patients with ^{25,26} :	To be used with caution in patients with ^{†25,26} :
<ul style="list-style-type: none"> Exacerbation or occurrence of IBD Infections, including candida and upper respiratory tract infections 	<ul style="list-style-type: none"> Hypersensitivity to the active substance or any excipients Clinically important active infections, including TB 	<ul style="list-style-type: none"> IBD Concomitant use of live vaccines Clinically important chronic infection or a history of recurrent infection

IBD: Inflammatory Bowel Disease; IL-17: Interleukin; SmPC: Summary of Product Characteristics; TB: Tuberculosis

*Please note that this list is not exhaustive

† According to the secukinumab SmPC, secukinumab should also be used with caution in patients with concomitant use of immunosuppressive therapy.²⁶



IL-23 inhibitors

Mechanism of action

Inhibit the pro-inflammatory regulatory cytokine IL-23, involved **in the differentiation, expansion and activity of pathogenic Th/Tc17 cells** and the expression of multiple effector cytokines.*¹⁴

Unlike IL-17 inhibitors, IL-23 inhibitors do not inhibit IL-17 producing cells other than Th/Tc17, thus **preserving partial IL-17 response against fungal and bacterial infections.**¹⁴

Unlike IL-12/23 inhibitors, IL-23 inhibitors preserve the IL-12 activation of Th1 response, potentially involved in protection against intracellular pathogens and tumour immune surveillance.¹⁴

Main safety risks you should look out for^{†‡,27}:



Infections

To avoid in patients with^{†‡,27}:



Hypersensitivity to the active substance or any of the excipients



Clinically important active infections (eg. Active TB)

To use with caution in patients with^{†‡,27}:



Concomitant use of live vaccines

IBD: Inflammatory Bowel Disease; IL-12/23: Interleukin 12/23; IL-17: Interleukin 17; IL-23: Interleukin 23; SmPC: Summary of Product Characteristics; TB: Tuberculosis; Tc17: IL-17-producing CD8(+)T cells; Th1: T Helper 1; Th17: T Helper 17

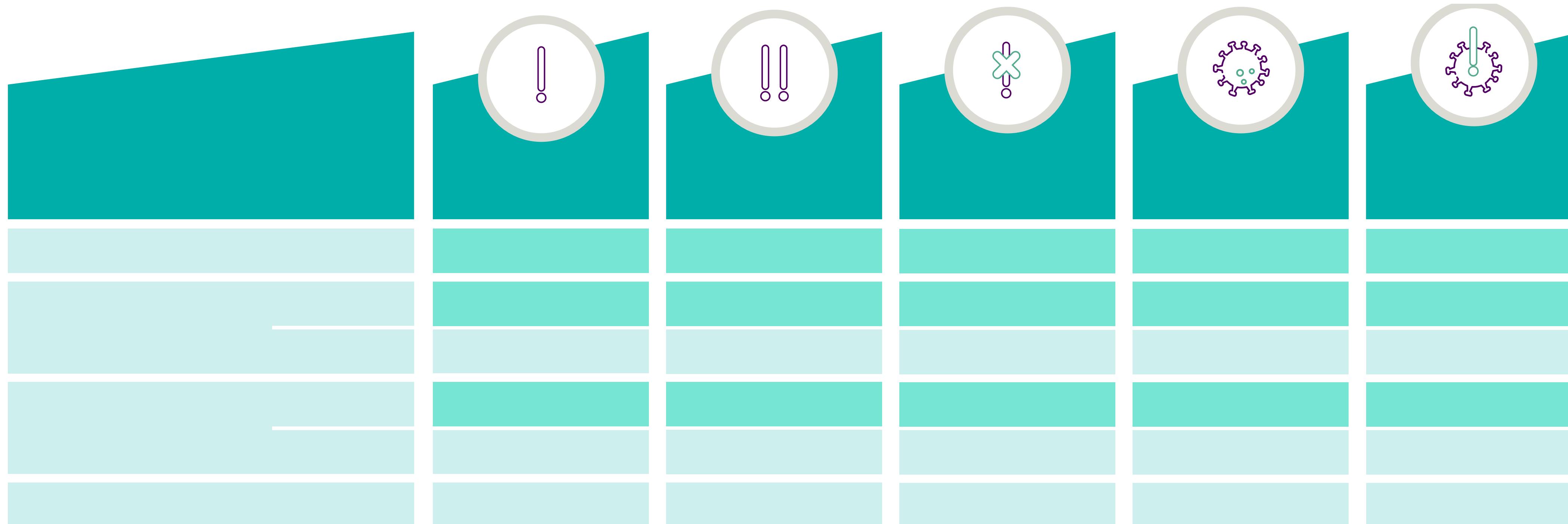
*Please note that this list is not exhaustive

†Other safety risks specifically listed in the guselkumab SmPC are: serious hypersensitivity reactions and increased incidence of liver enzyme elevations in patients treated with q4w.¹

‡According to the risankizumab SmPC, risankizumab should also be used with caution in patients with chronic infection, a history of recurrent infection or known risk factors for infection.²⁷

TREMFYA®, AN IL-23 INHIBITOR WITH A SAFETY PROFILE COMPARABLE TO PLACEBO AND CONSISTENT OVER 2 YEARS²⁸

- TREMFYA® has a good, consistent safety profile for both bio-naïve and bio-experienced patients, proven through 2 years of clinical trials in PsA²⁸



List of AEs, SAEs, AEs leading to discontinuation, infection and serious infection reported through Week 112 with TREMFYA® from the pooled analysis of 3 clinical trials*
Adapted from Rahman et al, 2021.²⁸

✓ **Low rates of AEs, SAEs, AEs leading to discontinuations, malignancies, and major adverse cardiovascular events, all comparable to placebo through Week 24 - with rates maintained up to 2 years[†]**

✓ **No attributed deaths[§]**

✓ **Rare opportunistic infections only observed in 3 out of 731 patients (0.4%) during clinical trials: 1 case of fungal esophagitis (Q8W), 1 case of disseminated herpes zoster (Q8W) and 1 case of listeria meningitis (PBO → Q4W)**

✓ **No cases of active tuberculosis, IBD, serum sickness reaction²⁸⁻³⁰**

AE: Adverse Event; CI: Confidence Interval; IBD: Inflammatory Bowel Disease; IL-23: Interleukin 23; ; PBO: Placebo; PY: Patient-Years; q4w: every 4 weeks; q8w: every 8 weeks; SAE: Serious Adverse Event.

*Pooled safety analysis of one phase 2 (Ph2) and two phase 3 trials DISCOVER 1 (D-1) and DISCOVER-2 (D-2). Bio-naïve (Ph2: 136; D-1: 263) and bio-experienced (Ph2: n=13; D-1: n=118; D-2: n=741) patients with active PsA were randomized to Tremfya® q8w or PBO in Ph2, and to Tremfya® q8w, q4w or PBO in D-1 and D-2. At W24, PBO patients switched to Tremfya® q8w (Ph2) or Tremfya® q4w (D-1 and D-2). AEs were reported through W56 for Ph2, W60 for D-1 and W112 for D-2.²⁸

† PBO patients who switched to Tremfya® q8w (n=29) and to q4w (n= 352) were included in this group.²⁸

‡ Though higher rates of SAEs and serious infection were observed during long-term follow-up in patients treated with TREMFYA® q8w, confidence intervals overlapped with rates observed in the PBO group during the PBO-controlled period. An increased incidence of liver enzyme elevations was observed in patients treated with TREMFYA® q4w compared to patients treated with TREMFYA® q8w or PBO was observed at W24, with no unexpected increase with longer treatment duration.²⁸

§ One death observed in the PBO to TREMFYA® q4w group, not related to the medication (road traffic accident).²⁹

TREMFYA®, AN IL-23 INHIBITOR WITH PROVEN LONG-TERM TOLERABILITY¹

TREMFYA® requires few precautions for your patient*¹

INFECTIONS AND INFESTATIONS	INVESTIGATIONS	IMMUNE SYSTEM DISORDERS	NERVOUS SYSTEM DISORDERS	GASTROINTESTINAL DISORDERS	SKIN AND SUBCUTANEOUS TISSUE DISORDERS	MUSCULOKELETAL AND CONNECTIVE TISSUE DISORDERS	GENERAL DISORDERS AND ADMINISTRATION SITE CONDITIONS
Respiratory tract infections	Transaminases increased	Hypersensitivity ●	Headache ●	Diarrhoea ●	Urticaria ●	Arthralgia ●	Injection site reactions ●
Herpes simplex infections	Neutrophil count decreased ●	Anaphylaxis ●			Rash ●		
Tinea infections							
Gastroenteritis							

- Very common*
- Common*
- Uncommon*

List of adverse reactions from psoriasis and psoriatic arthritis clinical studies and from post-marketing experience[†]

Adapted from the TREMFYA® SmPC 2022.¹



No labelled warnings or precautions
for IBD, malignancy , depression, neurological events or congestive heart failure¹

IBD: Inflammatory Bowel Disease; IL-23: Interleukin 23; PsA: Psoriatic Arthritis; q4w: every 4 weeks; SmPC: Summary of Product Characteristics.

*Please refer to SmPC for detailed information on the precautions and warnings for Tremfya®. When prescribing TREMFYA(r). q4w in PsA, it is recommended to evaluate liver enzymes at baseline and thereafter according to routine patient management.¹

[†]The adverse reactions are classified by MedDRA System Organ Class and frequency, using the following convention: very common ($\geq 1/10$), common ($\geq 1/100$ to $< 1/10$), uncommon ($\geq 1/1,000$ to $< 1/100$), rare ($\geq 1/10,000$ to $< 1/1,000$), very rare ($< 1/10,000$), not known (cannot be estimated from the available data).¹



RATIONALE

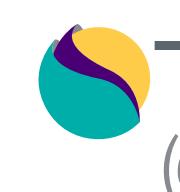
AE
IMPACT

MOA / RISKS OF
PSA TREATMENTS

TREMFYA®
SAFETY PROFILE

PI

REF

 Tremfya®
(guselkumab)

TREMFYA®'S STRONG EFFICACY AND GOOD SAFETY PROFILE RESULTS IN HIGH PATIENT RETENTION RATES

88%

of patients who started on TREMFYA® were still on TREMFYA® at 2 years²⁹

Only
2%

of patients discontinued due to an AE in 600 patient-years of follow-up³⁰

CHOOSE TREMFYA®, WITH ITS CONSISTENTLY LOW RATES OF AES AND SAES, FOR LASTING PATIENT REASSURANCE^{1, 28}

AE: Adverse Event; IL-23: Interleukin 23; SAE: Serious Adverse Event.



RATIONALE

AE
IMPACT

MOA / RISKS OF
PSA TREATMENTS

TREMFYA®
SAFETY PROFILE

PI

REF

janssen Immunology
PHARMACEUTICAL COMPANIES OF johnson & johnson



PREScribing INFORMATION

SKRAĆENE INFORMACIJE O LIJEKU TREMFYA UTEMELJENE NA SAŽETKU OPISA SVOJSTAVA LIJEKA ODOBRENOM U EU

DJELATNA TVAR: Jedna napunjena štrcaljka ili napunjena brizgalica sadrže 100 mg guselkumaba u 1 ml otopine. Prije propisivanja lijeka pročitajte Sažetak opisa svojstava lijeka.

INDIKACIJE: Plak psorijaza: Tremfy je indicirana za liječenje umjerene do teške plak psorijaze u odraslih koji su kandidati za sistemsku terapiju. **Psorijatični artritis:** Tremfy je samostalno ili u kombinaciji s metotreksatom (MTX) indicirana za liječenje aktivnog psorijatičnog artritisa u odraslih bolesnika koji nisu dovoljno dobro odgovorili na prethodnu terapiju antireumatskim lijekom koji modificira tijek bolesti (engl. *disease-modifying antirheumatic drug*, DMARD) ili nisu podnosili tu terapiju.

DOZIRANJE I PRIMJENA: Tremfy je namijenjena za primjenu pod vodstvom i nadzorom liječnika koji ima iskustva u dijagnosticiranju i liječenju bolesti za koje je indicirana. **Starje osobe (≥ 65 godina):**

Nije potrebno prilagođavati dozu. **Oštećenje funkcije bubrega ili jetre:** Nije se ispitivalo. **Djeca (< 18 godina):** Primjena nije indicirana jer djelotvornost i sigurnost nisu još ustanovljene. **Plak psorijaza: Odrasli:**

Preporučena doza lijeka Tremfy je 100 mg suputantom injekcijom u 0. i 4. tjednu, nakon čega se primjenjuje doza održavanja svakih 8 tjedana. U bolesnika koji ne ostvare odgovor nakon 16 tjedana liječenja treba razmotriti prekid liječenja. **Psorijatični artritis: Odrasli:** Preporučena doza lijeka Tremfy je 100 mg suputantom injekcijom u 0. i 4. tjednu, nakon čega se primjenjuje doza održavanja svakih 8 tjedana. U bolesnika koji su prema kliničkoj ocjeni izloženi visokom riziku od oštećenja zglobova može se razmotriti doza od 100 mg svaka 4 tjedna. U bolesnika koji ne ostvare odgovor nakon 24 tjedna liječenja treba razmotriti prekid liječenja. **KONTRAINDIKACIJE:**

Ozbiljna preosjetljivost na djetalnu tvar ili neku od pomoćnih tvari. Klinički važne aktivne infekcije (npr. aktivna tuberkuloza). **POSEBNA UPOZORENJA I MJERE OPREZA: Infekcije:** Tremfy može povećati rizik od infekcija. Liječenje lijekom Tremfy ne smije se započeti u bolesnika s bilo kakvom klinički važnom aktivnom infekcijom sve dok se ona ne povuče ili ne lječi na odgovarajući način.

Bolesnike treba uputiti da potraže liječničku pomoć ako se pojave znakovi ili simptomi klinički važne kronične ili akutne infekcije. Bolesnike koji razviju klinički važnu ili ozbiljnu infekciju ili koji ne odgovaraju na standardnu terapiju treba pažljivo nadzirati, a liječenje lijekom Tremfy treba prekinuti dok se infekcija ne povuče. **Testiranje na tuberkulozu prije liječenja:** Prije početka liječenja lijekom Tremfy potrebno je utvrditi imaju li bolesnici tuberkulozu. Bolesnike koji primaju lijek Tremfy treba pratiti zbog moguće pojave znakova i simptoma aktivne tuberkuloze tijekom i nakon liječenja. U bolesnika koji u anamnezi imaju latentnu ili aktivnu tuberkulozu, a u kojih se ne može potvrditi da su primili odgovarajuću terapiju, potrebno je razmotriti antituberkuloznu terapiju prije početka liječenja lijekom Tremfy.

Preosjetljivost: Nakon stavljanja lijeka u promet prijavljene su ozbiljne reakcije

preosjetljivosti, uključujući anafilaksiju. Neke ozbiljne reakcije preosjetljivosti nastupile su više dana

nakon liječenja guselkumabom, uključujući slučajevi praćene urticarijom i dispnejom. Ako dođe do

ozbiljne reakcije preosjetljivosti, treba odmah prekinuti primjenu lijeka Tremfy i uvesti odgovarajuću

terapiju. **Povišene vrijednosti jetrenih transaminaza:** U kliničkim ispitivanjima kod psorijatičnog

artritisa opažena je povećana incidencija povišenih vrijednosti jetrenih enzima u bolesnika koji su

primali lijek Tremfy svaka 4 tjedna u usporedbi s onima koji su primali lijek Tremfy svakih 8 tjedana

i onima koji su primali placebo. Kad se Tremfy primjenjuje svaka 4 tjedna za liječenje psorijatičnog

artritisa, preporučuje se praćenje vrijednosti jetrenih enzima na početku liječenja, a nakon toga

u skladu s rutinskim mjerama skrbi. U slučaju povišenih vrijednosti ALT-a ili AST-a te sumnje na oštećenje jetre izazvano lijekom potrebno je privremeno prekinuti liječenje lijekom Tremfy dok se ta dijagnoza ne isključi. **Cijepljenje:** Prije početka liječenja lijekom Tremfy potrebno je razmotriti primjenu svih potrebnih cjepiva u skladu s važećim smjernicama za cijepljenje. Bolesnici koji se liječe lijekom Tremfy ne smiju istodobno primiti živa cjepiva. Prije primjene živih virusnih ili živih bakterijskih cjepiva potrebno je prekinuti liječenje lijekom Tremfy tijekom najmanje 12 tjedana nakon posljednje doze, a primjena se može nastaviti najmanje 2 tjedna nakon cijepljenja.

NUSPOJAVE: Vrlo često: infekcije dišnih putova. **Često:** povišene vrijednosti transaminaza, glavobolja, proljev, artralgija, reakcije na mjestu injiciranja. **Manje često:** gastroenteritis, herpes simpleks infekcije, **tinea** infekcije, smanjenje broja neutrofila, preosjetljivost, anafilaksija, urticarija, osip.

Za ostale nuspojave pročitajte Sažetak opisa svojstava lijeka. **TRUDNOĆA:** Poželjno je izbjegavati primjenu lijeka Tremfy tijekom trudnoće. Žene reproduktivne dobi moraju koristiti učinkovite metode kontracepcije tijekom liječenja i još najmanje 12 tjedana po završetku liječenja. **DOJENJE:** Nije poznato izlučuje li se guselkumab u majčino mlijeko. Poznato je da se humana IgG protutijela izlučuju u majčino mlijeko prvi nekoliko dana nakon poroda, a da se ubrzo nakon toga smanjuju na niske koncentracije; poslijedno, rizik za dojeno dijete tijekom ovog razdoblja ne može se isključiti. Potrebno je donijeti odluku o prekidu dojenja ili suzdržavanju od liječenja lijekom Tremfy, uzimajući u obzir korist dojenja za dijete i korist liječenja lijekom Tremfy za ženu. **INTERAKCIJE:** Na temelju jednog ispitivanja faze 1 provedenog u ispitniku s umjerrenom do teškom plak psorijazom, interakcije između guselkumaba i supstrata CYP450 nisu vjerovatne. Nije potrebno prilagođavati dozu pri istodobnoj primjeni guselkumaba i supstrata CYP450. Sigurnost i djelotvornost lijeka Tremfy u kombinaciji s imunosupresivima, uključujući biološke lijekove, ili fototerapijom nisu se ocjenjivale.

NAČIN IZDAVANJA LIJEKA: Lijek se izdaje na recept. **NOSITELJ ODOBRENJA ZA STAVLJANJE LIJEKA U PROMET:** JANSSEN-CILAG INTERNATIONAL NV, Turnhoutseweg 30, B-2340 Beerse, Belgija. **BROJEVI ODOBRENJA ZA STAVLJANJE LIJEKA U PROMET:** Tremfy 100 mg otopina za injekciju u napunjenoj štrcaljki (guselkumab), EU/1/17 /1234/001 Tremfy 100 mg otopina za injekciju u napunjenoj brizgalici (guselkumab), EU/1/17 /1234/002 Datum sastavljanja ili posljednje izmjene informacija o lijeku: prosinac 2020. Na temelju Sažetka opisa svojstava lijeka odobrenog u EU-u u studenom 2020. **DATUM PRVOG ODOBRENJA: 10. studenoga 2017.** Datum pripreme ili datum posljednje izmjene teksta: rujan 2022.

SAMO ZA ZDRAVSTVENE RADNIKE

Prije propisivanja lijeka obvezno proučite posljednji odobreni sažetakopisa svojstva lijeka te posljednju odobrenu uputu o lijeku, dostupno na <https://www.ema.europa.eu/en/medicines/human/EPAR/tremfya>

Johnson & Johnson S.E d.o.o

Oreškovićeva 6h 10010 Zagreb,

Hrvatska



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