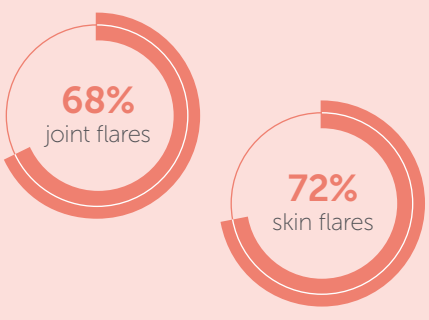
Disease Activity, Treatment Continuity and Family Planning: What Is Important to Know?

Disease control of moderate-to-severe psoriasis (PSO) is crucial, including for women of childbearing potential.[1, 2] However, many women with psoriasis stop treatment during pregnancy[3, 4]

Pregnancy can have an unpredictable effect on psoriasis[5]

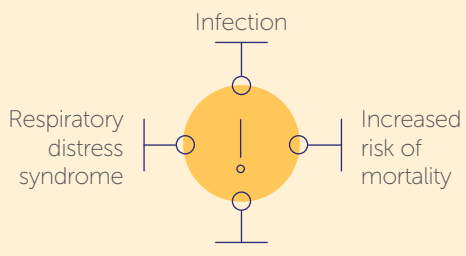
Women with psoriatic disease may experience skin disease worsening during **pregnancy**[a, 6]



Postpartum, 68% of women with psoriatic disease experience disease flares[6]

High disease activity can increase the risk of pregnancy complications, including neonate complications such as preterm birth and low birth weight[7]

Preterm birth and low birth weight are associated with:[8–12]



Many women stop treatment during pregnancy

65% of PSO patients may stop treatment during pregnancy due to different reasons:[b, 3, 4]

79% did so out of fear of harming their baby[4]

33% stopped due to misinformation[3]

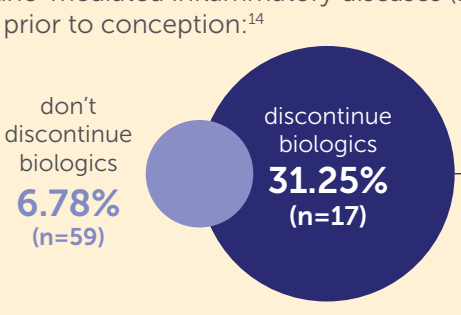
44% experienced a worsening in the severity of their disease[4]

57% of dermatologists consider their knowledge about the impact of treatments on pregnancy suboptimal[c, 13]

54% of dermatologists reported being comfortable with prescribing anti-tumour necrosis factor (TNF) for women of childbearing age[d, 4]

Stopping treatment can lead to higher rates of disease flares[14]

Rates of flare in pregnant women with immune-mediated inflammatory diseases (IMIDs) who, prior to conception:[14]



Pregnant women with IMIDs who discontinue biologics are more likely to have:[14]

- Active disease
- Gestational diabetes
- Disease flares
- Higher rates of glucocorticoid use during pregnancy

in comparison to pregnant women with IMIDs who don't discontinue biologics

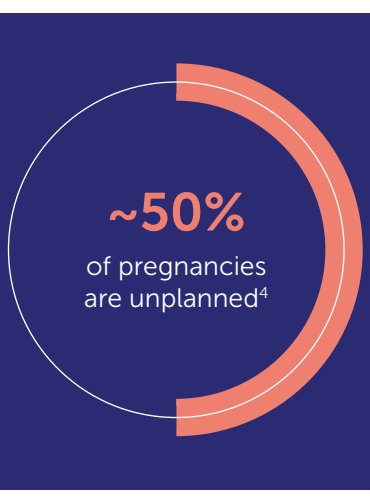
Stopping biologic therapy increases the risk of disease flare and the need to treat with corticosteroids, which may in turn increase the risk of:[15]

- Gestational diabetes
- Infection
- Preterm premature rupture of the membranes with higher doses

It is important that female patients planning a family are made fully aware of the importance of controlling severe or unstable PSO to maintain maternal health[2]

If your patient with moderate-to-severe PSO requires biologic treatment to control disease activity, consider whether they will still require this treatment during pregnancy

Some treatments for moderate-to-severe PSO are incompatible with pregnancy[2, 5]



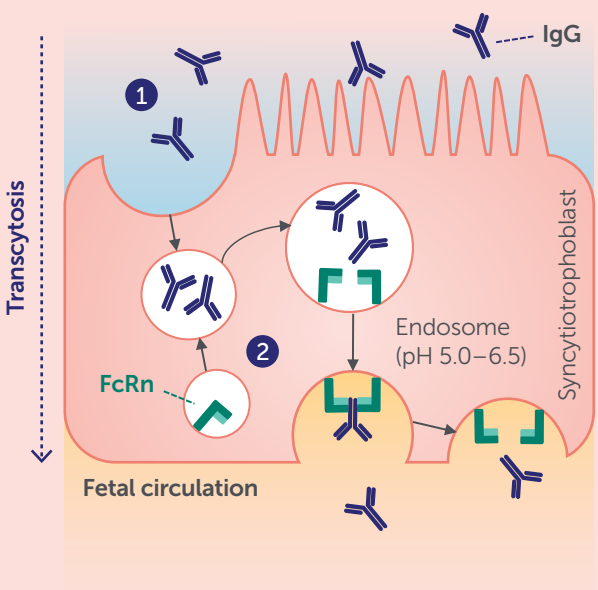
Implications of treatment choice should be discussed with all women of childbearing age with PSO, even if they are not actively planning to start a family[4]

Shared decision-making between dermatologists and patients has been shown to contribute to better treatment choices, improved treatment satisfaction and adherence[16]

If treatment with biologics is required, consider which treatments are compatible

Some biologics are monoclonal IgG1 antibodies and can therefore be actively transported across the placenta[17]

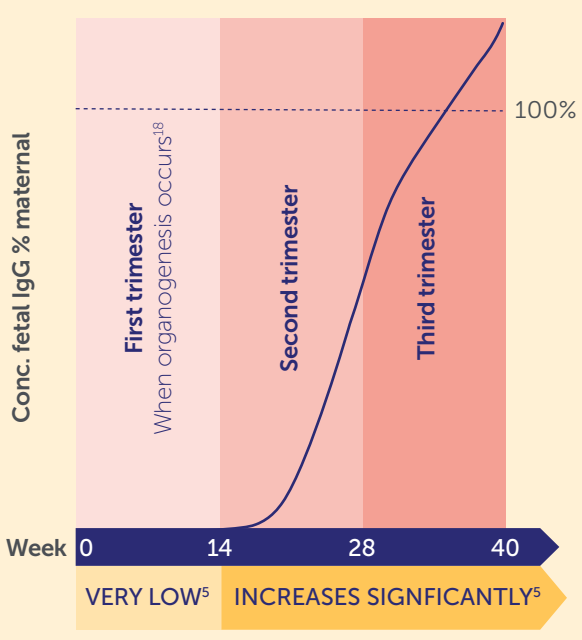
Maternal circulation[18]



1. IgG can cross the placenta to the fetal circulation during pregnancy[2, 5]
2. Active transport of IgG across the placenta is mediated by neonatal Fc receptors (FcRn)[17]

Adapted from Patel and Brussel (2020)[18]

The expression of FcRn and therefore IgG placental transfer is dependent on gestational age[19, 20]



Adapted from Pfaller et al (2021)[20]

Impact of biologic exposure throughout pregnancy on neonates

- Some biologics have been detected in intrauterine exposed newborns[21, 22]
- Most of the biological therapy have a prolonged half-life in newborn's blood, being detectable in infants up to **12 months** after birth (**usually 6–9 months**)[21, 22]
- Recent meta-analyses and studies on large cohorts of patients have shown an increase between 10% and 50% of severe **neonatal infections** following *in utero* exposure to anti-TNFs[23–25]
- Guidelines therefore recommend against the use of live vaccinations in infants up to **six months old** whose mothers received biologic therapy beyond **16 weeks gestation**[e, 2, 5]

Pregnancy can have an unpredictable effect on PSO

Some women will require systemic treatment during pregnancy to ensure optimal outcomes for mother and baby[2, 4–6]

Initiate timely conversations

It is important that dermatologists discuss the risks and benefits of treatment during pregnancy with all women of childbearing age[4, 16]

Assess compatibility of treatments

Consider the benefits of a treatment option that is compatible with pregnancy for all women of childbearing age to allow continuity of treatment before, during and after pregnancy, if clinically required[2, 5, 16, 17, 19]

[a]Results from a survey across Europe in women aged 18–45 years with moderate-to-severe PSO, PsA, or PSO + PsA (N=573). Participants were pregnant or had given birth in the last five years. [b]Results from a survey in the United States (US) (N=141). [c]Data from interviews with dermatologists from Germany, United Kingdom and the US (N=167). [d]Results from a survey of EU5 dermatologists (N=135). [e]Unless the benefit of the vaccination clearly outweighs the theoretical risk of administration.

1. Korman N. Br J Dermatol. 2019;182:840–848. **2.** Smith C et al. Br J Dermatol. 2020;183:628–637. **3.** De Simone C et al. G Ital Dermatol Venereol. 2020;155:434–440. **4.** Gottlieb A et al. Int J Womens Dermatol. 2019;5:141–150. **5.** Nast A et al. J Eur Acad Dermatol Venereol. 2021;35:281–317. **6.** McBride S et al. Int J Womens Dermatol. 2021;7:697–707. **7.** Bröms G et al. Acta Derm Venereol. 2018;98:728–734. **8.** Bently J et al. Acta Obstet Gynecol Scand. 2018;97:988–997. **9.** Gidi N et al. BMJ Paediatr Open. 2020;4:e000740. **10.** Jain S et al. Ann Pediatr Res. 2021;4:1071. **11.** Muhihi A et al. BMC Pregnancy Childbirth. 2016;16:110. **12.** Ludvigsson J et al. PLoS Med. 2018;15:e1002717. **13.** Murray S et al. BMJ Open. 2021;11:e043960. **14.** Allen K et al. Arch Obstet Gynaecol. 2022;306:1929–1937. **15.** Andreoli L et al. Autoimmun Rev. 2023;22(3):103259. **16.** van der Kraaij GE et al. J Eur Acad Dermatol Venereol. 2020;34:2574–2583. **17.** Giles I et al. Nat Rev Rheumatol. 2019;15:391–402. **18.** Patel D & Bussel J. J Allergy Clin Immunol. 2020;146:467–478. **19.** Lozano N et al. Am J Reprod Immunol. 2018;80:e12972. **20.** Pfaller B et al. Allergy. 2021;76:71–89. **21.** Weiss B et al. Front Pediatr. 2022;10:935034. **22.** Luo Y et al. Pediatr Allergy Immunol. 2023;34(2):e13911. **23.** Barenbrug L et al. J Autoimmun. 2021;122:102676. **24.** Bröms G et al. Aliment Pharmacol Ther. 2020;52(5):843–854. **25.** Dernoncourt A et al. BioDrugs. 2023;37(1):73–87.

Conc: concentration; FcRn: neonatal Fc receptors; IgG: immunoglobulin G; IMID: immune-mediated inflammatory diseases; PsA: psoriatic arthritis; PSO: psoriasis; TNF: tumour necrosis factor; US: United States.

This material was developed by UCB and is intended for healthcare professionals.

Inspired by patients. Driven by science.

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