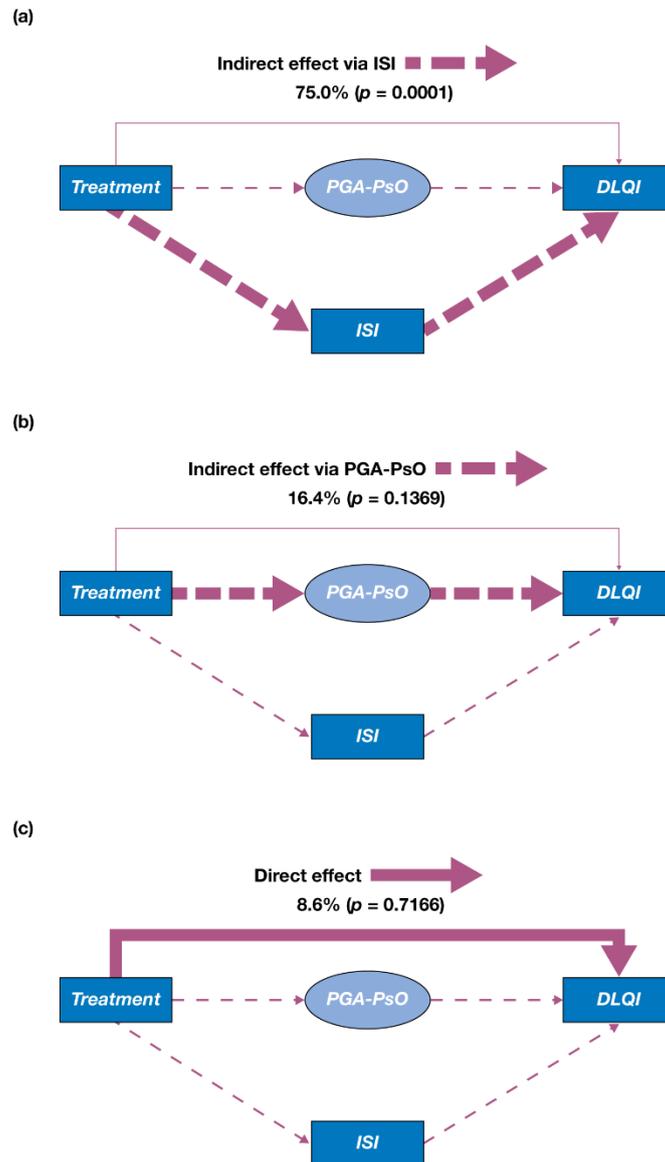


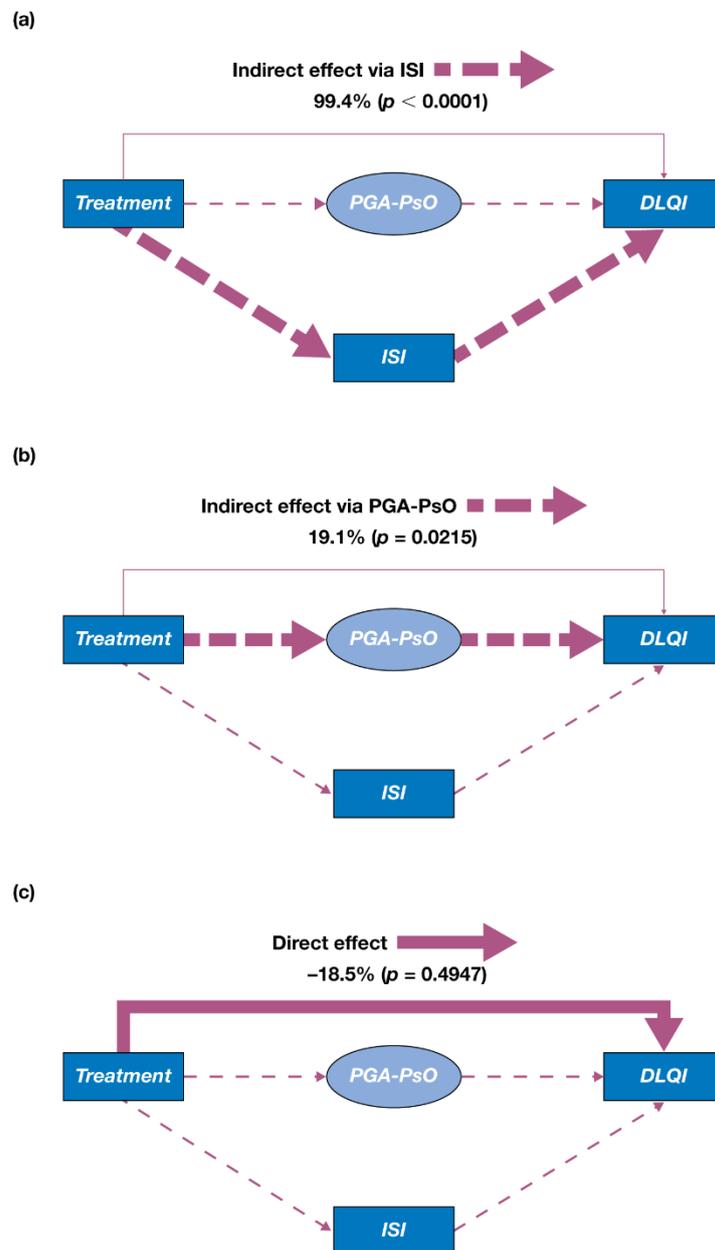
## Supplementary Materials

**Figure S1:** Effects of tofacitinib treatment on DLQI in the initial mediation model, using data from OPAL Broaden. **(a)** Indirect effect via itch (measured by ISI); **(b)** Indirect effect via PGA-PsO; **(c)** Direct effect.



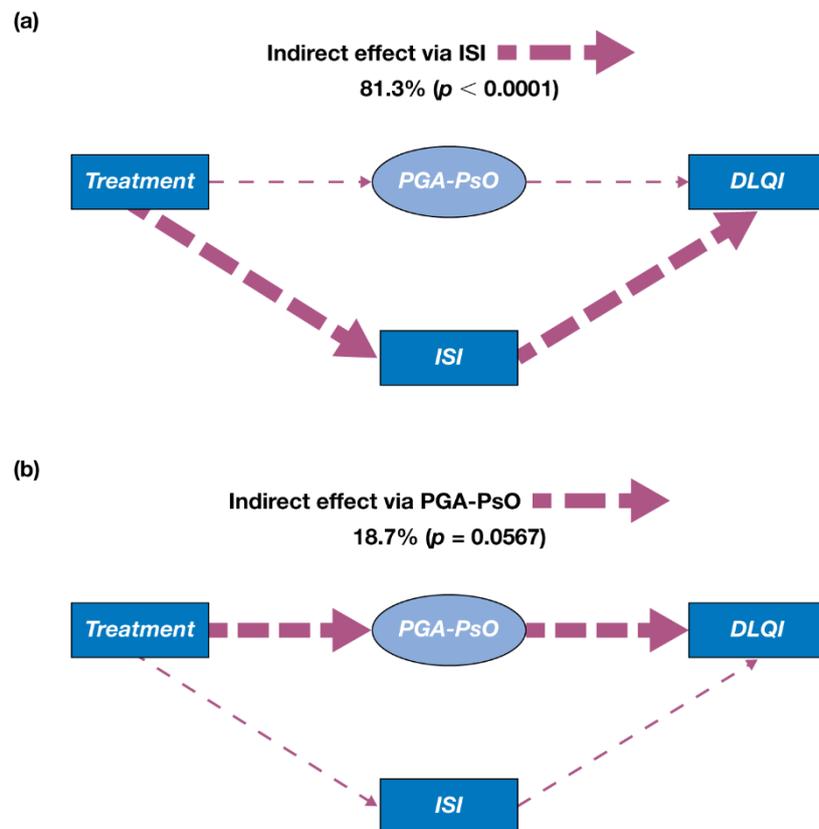
Treatment was represented by a binary variable (tofacitinib 5 mg BID [value of 1] versus placebo [value of 0]); the model included mean scores of each outcome from Months 1 and 3 for every patient with available data from OPAL Broaden; PGA-PsO was a latent variable represented by means of erythema, induration, and scaling. BID, twice daily; DLQI, Dermatology Life Quality Index; ISI, Itch Severity Item; PGA-PsO, Physician Global Assessment of Psoriasis.

**Figure S2:** Effects of tofacitinib treatment on DLQI in the initial mediation model, using data from OPAL Beyond. (a) Indirect effect via itch (measured by ISI); (b) Indirect effect via PGA-PsO; (c) Direct effect.



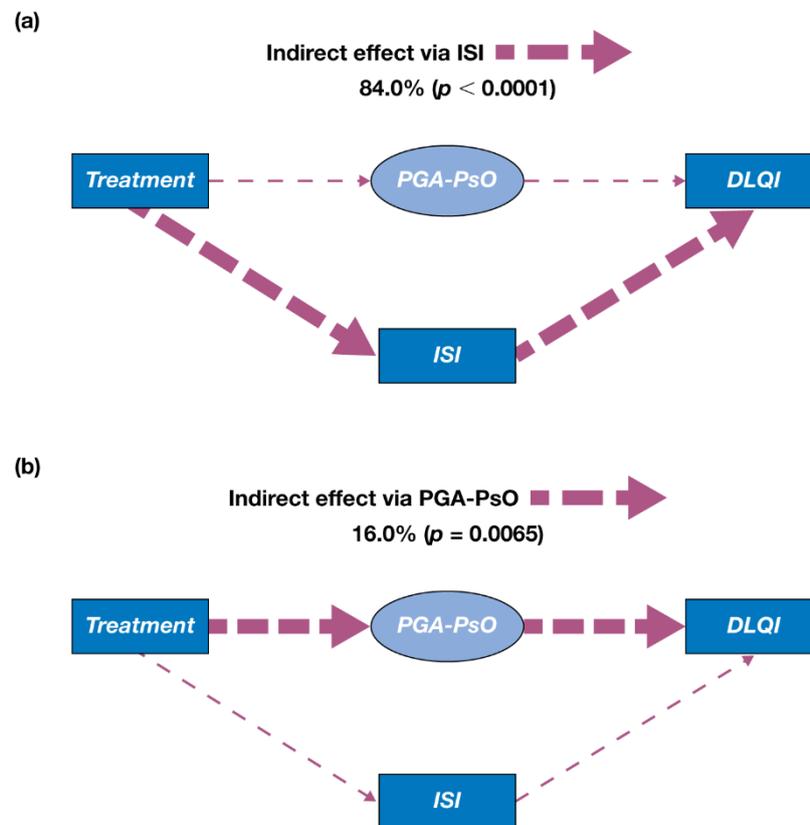
Treatment was represented by a binary variable (tofacitinib 5 mg BID [value of 1] versus placebo [value of 0]); the model included mean scores of each outcome from Months 1 and 3 for every patient with available data from OPAL Beyond; PGA-PsO was a latent variable represented by means of erythema, induration, and scaling. BID, twice daily; DLQI, Dermatology Life Quality Index; ISI, Itch Severity Item; PGA-PsO, Physician Global Assessment of Psoriasis.

**Figure S3:** Effects of tofacitinib treatment on DLQI in the re-specified mediation model, using data from OPAL Broaden. **(a)** Indirect effect via itch (measured by ISI); **(b)** Indirect effect via PGA-PsO.



Treatment was represented by a binary variable (tofacitinib 5 mg BID [value of 1] versus placebo [value of 0]); the model included mean scores of each outcome from Months 1 and 3 for every patient with available data from OPAL Broaden; PGA-PsO was a latent variable represented by means of erythema, induration, and scaling. BID, twice daily; DLQI, Dermatology Life Quality Index; ISI, Itch Severity Item; PGA-PsO, Physician Global Assessment of Psoriasis.

**Figure S4:** Effects of tofacitinib treatment on DLQI in the re-specified mediation model, using data from OPAL Beyond. **(a)** Indirect effect via itch (measured by ISI); **(b)** Indirect effect via PGA-PsO.



Treatment was represented by a binary variable (tofacitinib 5 mg BID [value of 1] versus placebo [value of 0]); the model included mean scores of each outcome from Months 1 and 3 for every patient with available data from OPAL Beyond; PGA-PsO was a latent variable represented by means of erythema, induration, and scaling. BID, twice daily; DLQI, Dermatology Life Quality Index; ISI, Itch Severity Item; PGA-PsO, Physician Global Assessment of Psoriasis.