

# nUVB vs MTX for psoriasis

## Review information

### Authors

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Citation example: [Empty name], DHaMA. nUVB vs MTX for psoriasis. Cochrane Database of Systematic Reviews [Year], Issue [Issue].

### Contact person

*Sundhedsstyrelsen*

## Characteristics of studies

### Characteristics of included studies

#### *Al Hamamy 2014*

<b>Methods</b>	<b>Study design:</b> U <b>Study grouping:</b> <b>Open Label:</b> YES <b>Cluster RCT:</b>
<b>Participants</b>	<b>Baseline Characteristics</b> Intervention <ul style="list-style-type: none"> <li>● <i>Age (mean +/- sd) : 41.52 + 11.16</i></li> <li>● <i>Female (%) : 50</i></li> <li>● <i>Baseline PASI (mean +/- sd): 38.97 + 6.39</i></li> </ul> Control <ul style="list-style-type: none"> <li>● <i>Age (mean +/- sd) : 41.52 + 11.16</i></li> <li>● <i>Female (%) : 50</i></li> <li>● <i>Baseline PASI (mean +/- sd): 38.97 + 6.39</i></li> </ul> <b>Included criteria:</b> plaque type psoriasis, BSA >10 <b>Excluded criteria:</b> The exclusion criteria were patients with known history of MTX intolerance, photosensitivity disorders, skin cancer, use of photosensitizing medications, pregnant or lactating women, patients younger than 18 years or older than 60 years, and patients with severe hepatic, renal, hematological, or other systemic disorders, immunosuppression, diabetes mellitus, and alcohol abuse. <b>Pretreatment:</b> Gupper er meget ens (jvf. tabel 1). Det virker som om de er parret eller randomiseret.
<b>Interventions</b>	<b>Intervention Characteristics</b> Intervention <ul style="list-style-type: none"> <li>● <i>treatment:</i> NBUVB phototherapy (thrice weekly on non-consecutive days,)</li> </ul> Control

	<ul style="list-style-type: none"> <li>● <i>treatment</i> : MTX (Dose of 0.2 mg/kgweekly with a maximum of 20 mg/week),</li> </ul>
<b>Outcomes</b>	<p><i>antal pt med PASI 90</i></p> <ul style="list-style-type: none"> <li>● <b>Outcome type:</b> DichotomousOutcome</li> <li>● <b>Measure names:</b> ["Baseline"]</li> <li>● <b>Reporting:</b> Partially reported</li> <li>● <b>Scale:</b> %</li> <li>● <b>Range:</b> 0-100</li> <li>● <b>Direction:</b> Higher is better</li> <li>● <b>Data value:</b> Change from baseline</li> </ul> <p><i>Gi-gener (kvalme)</i></p> <ul style="list-style-type: none"> <li>● <b>Outcome type:</b> DichotomousOutcome</li> <li>● <b>Measure names:</b> ["Baseline"]</li> <li>● <b>Reporting:</b> Partially reported</li> <li>● <b>Scale:</b> antal</li> <li>● <b>Unit of measure:</b> ja/nej</li> <li>● <b>Direction:</b> Lower is better</li> <li>● <b>Data value:</b> Endpoint</li> </ul> <p><i>weeks to clearence</i></p> <ul style="list-style-type: none"> <li>● <b>Outcome type:</b> ContinuousOutcome</li> <li>● <b>Measure names:</b> ["Baseline"]</li> <li>● <b>Reporting:</b> Fully reported</li> <li>● <b>Direction:</b> Lower is better</li> <li>● <b>Data value:</b> Endpoint</li> </ul> <p><i>time to relapse</i></p> <ul style="list-style-type: none"> <li>● <b>Outcome type:</b> ContinuousOutcome</li> <li>● <b>Measure names:</b> ["Baseline"]</li> <li>● <b>Direction:</b> Higher is better</li> <li>● <b>Data value:</b> Endpoint</li> </ul>
<b>Identification</b>	<p><b>Sponsorship source:</b> no information  <b>Country:</b> Iraq  <b>Setting:</b> Baghdad teaching hospital  <b>Comments:</b> Meget høj start PASI! Behandler indtil PASI90 eller max 6 mdr. også for mtx  <b>Authors name:</b> Al-Hamamy HR et al  <b>Institution:</b> department of dermatology &amp; venereologyAL-Nahrain college of medicin  <b>Email:</b> ihsannazar@yahoo.com  <b>Address:</b></p>
<b>Notes</b>	<p><i>Birgitte Holm Petersen on 08/09/2015 22:06</i>  <b>Study Design</b>  This comparative, therapeutic, outpatient-based study. they were divided into threegrups according to their treatment mode</p> <p><i>Birgitte Holm Petersen on 08/09/2015 22:45</i>  <b>Continuous Outcomes</b>  time to relapse: followup 1 year</p>

## Risk of bias table

Bias	Authors' judgement	Support for judgement
Blinding of participants and personnel All outcomes	High risk	Judgement Comment: Ingen Blinding! Hvis man ved man får mtX, kender man bivirkningerne.
Blinding of participants and personnel Klinisk effekt	High risk	
Incomplete outcome data All outcomes	Low risk	
Incomplete outcome data Klinisk effekt	High risk	
Blinding of outcome assessors Klinisk effekt	High risk	Judgement Comment: Ingen blinding
Blinding of outcome assessors All outcomes	High risk	
Other sources of bias	Low risk	
Sequence Generation	Unclear risk	

## Footnotes

## References to studies

## Included studies

**Al Hamamy 2014**

Al-Hamamy HR; Al-Mashhadani SA; Mustafa IN. Comparative study of the effect of narrowband ultraviolet B phototherapy plus methotrexate vs. narrowband ultraviolet B alone and methotrexate alone in the treatment of plaque-type psoriasis.. International journal of dermatology 2014;53(12):1531-1535. [DOI: <http://dx.doi.org/10.1111/ijd.12444>]

## Excluded studies

**Akasaka 2013**

Akasaka, E.; Mabuchi, T.; Manabe, Y.; Yahagi, E.; Yamada-Hiruma, A.; Yamaoka, H.; Kojima, T.; Kato, M.; Ikoma, N.; Ozawa, A.; Haruki, Y.. Long-term efficacy of psoriasis vulgaris treatments: analysis of treatment with topical corticosteroid and/or vitamin D3 analog, oral cyclosporin, etretinate and phototherapy over a 35-year period, 1975-2010. J Dermatol 2013;40(4):238-43. [DOI: <http://dx.doi.org/10.1111/1346-8138.12069>]

**Asawanonda 2005**

Asawanonda P; Chingchai A; Torranin P. Targeted UV-B phototherapy for plaque-type psoriasis.. Archives of Dermatology 2005;141(12):1542-1546. [DOI: ]

**Atherton 1996**

Atherton DJ; Cohen BL; Knobler E; Garzon M; Morelli JG; Tay YK; Weston WL; Taieb A; Morison WL; Rasmussen JE. Phototherapy for children.. Pediatric dermatology 1996;13(5):415-426. [DOI: ]

**Boztepe 2006**

Boztepe G; Karaduman A; Sahin S; Hayran M; Kolemen F. The effect of maintenance narrow-band ultraviolet B therapy on the duration of remission for psoriasis: a prospective randomized clinical trial.. International journal of dermatology 2006;45(3):245-250. [DOI: ]

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Calzavara-Pinton, P. G.; Sala, R.; Arisi, M.; Rossi, M. T.; Venturini, M.; Ortel, B.. Synergism between narrowband ultraviolet B phototherapy and etanercept for the treatment of plaque-type psoriasis. British Journal of Dermatology 2013;169(1):130-6. [DOI: <http://dx.doi.org/10.1111/bjd.12277>]

**Coimbra 2013**

Coimbra,S.; Oliveira,H.; Figueiredo,A.; Rocha-Pereira,P.; Santos-Silva,A.. Factors associated with the length of remission of psoriasis vulgaris.. Clinical Drug Investigation 2013;33(11):855-860. [DOI: <http://dx.doi.org/10.1007/s40261-013-0122-9>]

**Dawe 1998**

Dawe RS; Wainwright NJ; Cameron H; Ferguson J. Narrow-band (TL-01) ultraviolet B phototherapy for chronic plaque psoriasis: three times or five times weekly treatment?.. British Journal of Dermatology 1998;138(5):833-839. [DOI: ]

**Dawe 2009**

Dawe,R. S.. Comparing narrowband ultraviolet B treatment regimens for psoriasis.. British Journal of Dermatology 2009;161(6):1215-1216. [DOI: <http://dx.doi.org/10.1111/j.1365-2133.2009.09394.x>]

**Diffey 2007**

Diffey BL; Farr PM. The challenge of follow-up in narrowband ultraviolet B phototherapy.. British Journal of Dermatology 2007;157(2):344-349. [DOI: ]

**Fischer 1979**

Fischer T; Juhlin L; Swanbeck G; Wennersten G. [Lamps suitable for light therapy]. Lakartidningen 1979;76(43):3766. [DOI: ]

**Fischer 1984**

Fischer T; Alsins J; Berne B. Ultraviolet-action spectrum and evaluation of ultraviolet lamps for psoriasis healing.. International journal of dermatology 1984;23(10):633-637. [DOI: ]

**Foged 1984**

Foged EK; Schmidt H. Treatment modalities of psoriatics over a 6-year period (1975-1981).. Dermatologica 1984;168(2):90-93. [DOI: ]

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Gelfand JM; Wan J; Callis Duffin K; Krueger GG; Kalb RE; Weisman JD; Sperber BR; Stierstorfer MB; Brod BA; Schleicher SM; Bebo BF Jr; Troxel AB; Shin DB; Steinemann JM; Goldfarb J; Yeung H; Van Voorhees AS. Comparative effectiveness of commonly used systemic treatments or phototherapy for moderate to severe plaque psoriasis in the clinical practice setting.. *Archives of Dermatology* 2012;148(4):487-494. [DOI: <http://dx.doi.org/10.1001/archdermatol.2012.370>]

**Green 1989**

Green CM; Ferguson J; MacLeod TM; Millar BW; Raffle EJ. Polymorphonuclear leucocyte chemotaxis in response to leukotriene B4 in treated and untreated psoriatics.. *Dermatologica* 1989;178(1):20-22. [DOI: ]

**Jain 2007**

Jain VK; Aggarwal K; Jain K; Bansal A. Narrow-band UV-B phototherapy in childhood psoriasis.. *International journal of dermatology* 2007;46(3):320-322. [DOI: ]

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Jain VK; Bansal A; Aggarwal K; Jain K. Enhanced response of childhood psoriasis to narrow-band UV-B phototherapy with preirradiation use of mineral oil.. *Pediatric dermatology* 2008;25(5):559-564. [DOI: <http://dx.doi.org/10.1111/j.1525-1470.2008.00729.x>]

**Karakawa 2011**

Karakawa M.; Komine M.; Takekoshi T.; Sakurai N.; Minatani Y.; Tada Y.; Saeki H.; Tamaki K.. Duration of remission period of narrowband ultraviolet B therapy on psoriasis vulgaris.. *The Journal of dermatology* 2011;38(7):655-60. [DOI: [10.1111/j.1346-8138.2010.01053.x](http://dx.doi.org/10.1111/j.1346-8138.2010.01053.x)]

**Kaur 2006**

Kaur M; Oliver B; Hu J; Feldman SR. Nonlaser UVB-targeted phototherapy treatment of psoriasis.. *Cutis* 2006;78(3):200-203. [DOI: ]

**Kenicer 1981**

Kenicer KJ; Lakshmipathi T; Addo HA; Johnson BE; Frain-Bell W. An assessment of the effect of photochemotherapy (PUVA) and UV-B phototherapy in the treatment of psoriasis.. *British Journal of Dermatology* 1981;105(6):629-639. [DOI: ]

**KilincKaraarslan 2007**

Kilinc Karaarslan,I.; Teban,L.; Dawid,M.; Tanew,A.; Kittler,H.. Changes in the dermoscopic appearance of melanocytic naevi after photochemotherapy or narrow-band ultraviolet B phototherapy.. *Journal of the European Academy of Dermatology and Venereology* 2007;21(4):526-531. [DOI: <http://dx.doi.org/10.1111/j.1468-3083.2006.02020.x>]

**Kist 2005**

Kist JM; Van Voorhees AS. Narrowband ultraviolet B therapy for psoriasis and other skin disorders. *Advances in Dermatology* 2005;21(Journal Article):235-250. [DOI: ]

**Klaber 1980**

Klaber,M. R.. Ultra-violet light for psoriasis.. *Physiotherapy* 1980;66(2):36-38. [DOI: ]

**Koek 2006**

Koek MB; Buskens E; Steegmans PH; van Weelden H; Bruijnzeel-Koomen CA; Sigurdsson V. UVB phototherapy in an outpatient setting or at home: a pragmatic randomised single-blind trial designed to settle the discussion. The PLUTO study.. BMC Medical Research Methodology 2006;6(Journal Article):39. [DOI: ]

**Koek 2009**

Koek, M. B.; Buskens, E.; van Weelden, H.; Steegmans, P. H.; Bruijnzeel-Koomen, C. A.; Sigurdsson, V.. Home versus outpatient ultraviolet B phototherapy for mild to severe psoriasis: pragmatic multicentre randomised controlled non-inferiority trial (PLUTO study). BMJ 2009;338:b1542. [DOI: <http://dx.doi.org/10.1136/bmj.b1542>]

**Larko 1983**

Larko,O.. A new dithranol cream compared with placebo and UVB in the treatment of psoriasis.. Lakartidningen 1983;80(17):1788-1790. [DOI: ]

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Naldi L; Svensson A; Diepgen T; Elsner P; Grob JJ; Coenraads PJ; Bavinck JN; Williams H; European Dermato-Epidemiology Network. Randomized clinical trials for psoriasis 1977-2000: the EDEN survey.. Journal of Investigative Dermatology 2003;120(5):738-741. [DOI: ]

**Naldi 2010**

Naldi,L.. Malignancy concerns with psoriasis treatments using phototherapy, methotrexate, cyclosporin, and biologics: facts and controversies. Clinics in dermatology 2010;28(1):88-92. [DOI: <http://dx.doi.org/10.1016/j.clindermatol.2009.03.003>]

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Nee,T. S.. Phototherapy.. Clinics in dermatology 1997;15(5):753-767. [DOI: <http://dx.doi.org/10.1016/S0738-081X%2897%2900016-3>]

**Paradisi 2010**

Paradisi A; Abeni D; Finore E; Di Pietro C; Sampogna F; Mazzanti C; Pilla MA; Tabolli S. Effect of written emotional disclosure interventions in persons with psoriasis undergoing narrow band ultraviolet B phototherapy.. European Journal of Dermatology 2010;20(5):599-605. [DOI: <http://dx.doi.org/10.1684/ejd.2010.1018>]

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Park YK; Kim HJ; Koh YJ. Combination of photochemotherapy (PUVA) and ultraviolet B (UVB) in the treatment of psoriasis vulgaris.. Journal of Dermatology 1988;15(1):68-71. [DOI: ]

**Pavlovsky 2011**

Pavlovsky M; Baum S; Shpiro D; Pavlovsky L; Pavlotsky F. Narrow band UVB: is it effective and safe for paediatric psoriasis and atopic dermatitis?.. Journal of the European Academy of Dermatology & Venereology 2011;25(6):727-729. [DOI: <http://dx.doi.org/10.1111/j.1468-3083.2010.03832.x>]

**Petrozzi 1985**

Petrozzi,J. W.. UVB maintenance phototherapy in psoriasis.. International journal of dermatology 1985;24(9):600-602. [DOI: ]

**Picot 1992**

Picot E; Meunier L; Picot-Debeze MC; Peyron JL; Meynadier J. Treatment of psoriasis with a 311-nm UVB lamp.. *British Journal of Dermatology* 1992;127(5):509-512. [DOI: <http://dx.doi.org/10.1111/j.1365-2133.1992.tb14850.x>]

**Selvaag 2000**

Selvaag E; Caspersen L; Bech-Thomsen N; de Fine Olivarius F; Wulf HC. Optimized UVB treatment of psoriasis: a controlled, left-right comparison trial.. *Journal of the European Academy of Dermatology & Venereology* 2000;14(1):19-21. [DOI: ]

**Slaper 1986**

Slaper H; Schothorst AA; van der Leun JC. Risk evaluation of UVB therapy for psoriasis: comparison of calculated risk for UVB therapy and observed risk in PUVA-treated patients.. *Photo-dermatology* 1986;3(5):271-283. [DOI: ]

**Stern 1986**

Stern RS; Armstrong RB; Anderson TF; Bickers DR; Lowe NJ; Harber L; Voorhees J; Parrish JA. Effect of continued ultraviolet B phototherapy on the duration of remission of psoriasis: a randomized study.. *Journal of the American Academy of Dermatology* 1986;15(3):546-552. [DOI: ]

**Stern 1997**

Stern,R. S.. Narrowband UV-B and psoriasis. *Archives of Dermatology* 1997;133(12):1587-1588. [DOI: ]

**Takahashi 2013**

Takahashi H.; Tsuji H.; Ishida-Yamamoto A.; Iizuka H.. Comparison of clinical effects of psoriasis treatment regimens among calcipotriol alone, narrowband ultraviolet B phototherapy alone, combination of calcipotriol and narrowband ultraviolet B phototherapy once a week, and combination of calcipotriol and narrowband ultraviolet B phototherapy more than twice a week.. *The Journal of dermatology* 2013;40(6):424-7. [DOI: [10.1111/1346-8138.12102](http://dx.doi.org/10.1111/1346-8138.12102)]

**vanWeelden 1988**

van Weelden H; De La Faille HB; Young E; van der Leun JC. A new development in UVB phototherapy of psoriasis.. *British Journal of Dermatology* 1988;119(1):11-19. [DOI: ]

**Yarbrough 2009**

Yarbrough,C.; Yentzer,B. A.; Yelverton,C. B.; Feldman,S. R.. Continued use of home narrowband ultraviolet B light phototherapy for psoriasis after completion of a clinical trial.. *Journal of the American Academy of Dermatology* 2009;60(5):877-879. [DOI: <http://dx.doi.org/10.1016/j.jaad.2008.10.050>]

**Young 1972**

Young,E.. Ultraviolet therapy of psoriasis: a critical study.. *British Journal of Dermatology* 1972;87(4):379-382. [DOI: ]

**Other references****Additional references****Other published versions of this review**

## Classification pending references

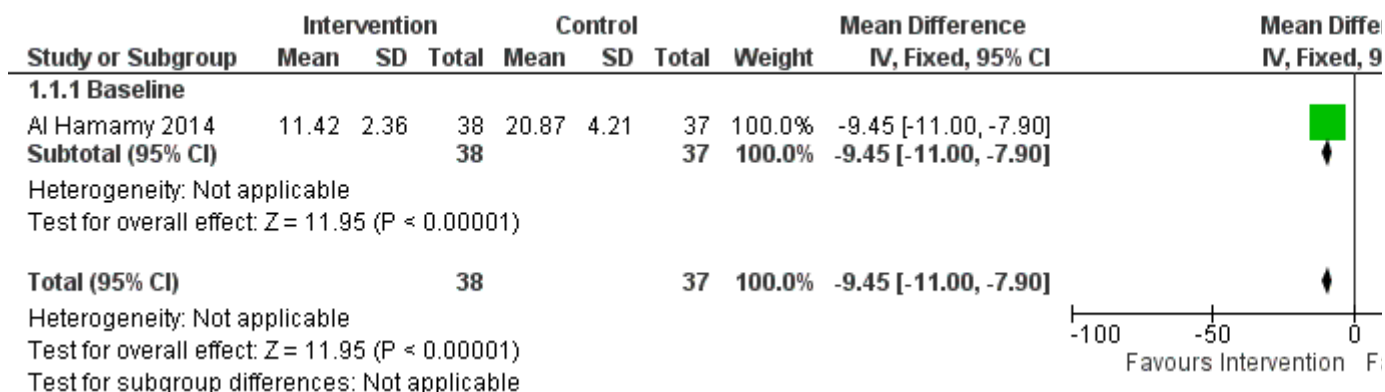
## Data and analyses

## 1 nUVB vs MTX

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
1.1 weeks to clearance	1	75	Mean Difference (IV, Fixed, 95% CI)	-9.45 [-11.00, -7.90]
1.1.1 Baseline	1	75	Mean Difference (IV, Fixed, 95% CI)	-9.45 [-11.00, -7.90]
1.2 time to relapse	1	75	Mean Difference (IV, Fixed, 95% CI)	-0.40 [-2.92, 2.12]
1.2.1 Baseline	1	75	Mean Difference (IV, Fixed, 95% CI)	-0.40 [-2.92, 2.12]
1.3 antal pt med PASI 90	1		Risk Ratio (IV, Fixed, 95% CI)	No totals
1.3.1 Baseline	1		Risk Ratio (IV, Fixed, 95% CI)	No totals
1.4 Gi-gener (kvalme)	0		Risk Ratio (IV, Fixed, 95% CI)	No totals
1.4.1 Baseline	0		Risk Ratio (IV, Fixed, 95% CI)	No totals

## Figures

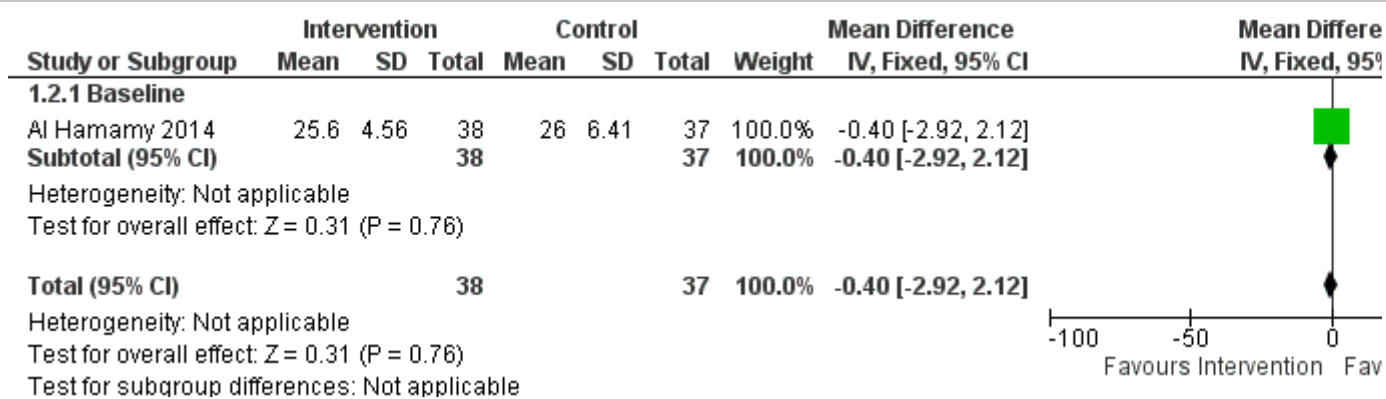
## Figure 1 (Analysis 1.1)



Forest plot of comparison: 1 nUVB vs MTX, outcome: 1.1 weeks to clearance.

## Figure 2 (Analysis 1.2)





Forest plot of comparison: 1 nUVB vs MTX, outcome: 1.2 time to relapse.