Supplementary material II

Table S1 and S2

Table S1 Characteristics of all included studies

Author, reference (year of publication)	Disease	Study design	Treatment arms (no. of patients)	Mean treatment duration [range], mo	Mean FU duration [range], mo	No. of patients (m/f)	Mean patients age [range], y	Previous treatments (no. of patients)	Mean weekly dose MTX [range]
Chartaux, 74 (2010)	AA	Retrospective CS	MTX	Unk [6->24]	30	33 (9/24)	Unk	PUVA (19), OCS (10), CST bolus (5)	Unk [15-25 mg]
Alkeraye, 77 (2017)	AA	Prospective CCS	Pred + MTX (14) Pred (6)	≥ 6	≥ 6	14	Unk [21-72]	Pred 500 mg/d; 3 d/mo for 3 mo (14)	Unk [10-20 mg]
Anuset, 78 (2016)	AA	Retrospective CS	MTX	Unk	33 [6-81]	26 (8/18)	Unk	TCS (18), ICS (16), MNX (15), PT (14), DPCP (11), other (11)	Unk [15-20 mg]
Chong, 79 (2017)	AA	CS	MTX	Unk	Unk	14	Unk	TA (14)	0.2 mg/kg/**d**
Droitcourt, 60 (2012)	AA	Retrospective CS	MTX	19 [3-30] (median)	8 [7-20]	20 (8/12)	33 [14-57] (median)	TCS (13), MNX (14), T TAC (1), PT (4), Pred (1)	Unk [12.5 - 25 mg]
Firooz, 80 (2013)	AA	Retrospective CS	MTX	Unk	14.4 [4-32]	10 (2/8)	29.6	Artificial hair transplant (1), AZA (2), clobetasol under occlusion (3), CST injection (1), DPCP (5), DTN (1), herbal medicine (1), levamisole (1), MNX (9), PUVA (2), Sul (2), T dinitrochlorobenzene (5), zinc (4)	Unk [5 mg/wk - 37.5 mg/d]
Hammer-schmidt, 75 (2014)	AA	Retrospective Co	MTX	Unk	13 [3-51]	31 (11/20)	40 [15-72]	T sensitizers (18), SCS (16)	Unk [10 -25 mg]
Joly, 81 (2006)	AA	Retrospective CCS	Pred+MTX (16) MTX (6)	Unk [9-27]	15	22 (7/15)	37.6	IV CS (4), OCS (9), PUVA (22), TAC (3), TCS (22)	Unk [15-30 mg]
Landis, 82 (2017)	AA	Retrospective CS	MTX	Unk [1.5-Unk]	Unk	14 (4/10)	Unk [3-17]	Anthralin, excimer laser, IL or IM CST TCS, MNX, PT, Squaric Acid, Sul (No. Unk)	Unk [2.5-15 mg]
Lim, 68 (2017)	AA	Retrospective Co	MTX	7.025	Unk [12-20]	29 (16/13)	40.31 [16-65]	DPCP (2), Cry (8), CSTA (3), MPP (7), SCS (9), Sul (1), TCA sc (29), TCST (29), UVB (13)	14.5 mg [10-Unk]
Lucas, 59 (2016)	AA	Retrospective CS	MTX	Unk [32.4 - 37.32]	Unk [2-72]	5 (2/3)	Unk, ped	SCS, TCS (No. Unk)	Unk [17.5-25 mg]
Royer, 83 (2011)	AA	Retrospective CS	MTX	14.2 (1-31)	Unk	14 (6/8)	14.7. (8-18)	Isoprinosine, OCS, PT, UVA (No. Unk)	18.9 mg [15-25]
Thi Van, 76 (2019)	AA	Prospective Co	MTX	4	6	38 (31/7)	29.6	Unk	7.5 mg
Vano-Galvan, 84 (2017)	AA	Retrospective CCS	MTX (10) MTX+Pred (5)	Unk	Unk	15	Unk	Unk	Unk [15-25 mg]
Anderson, 87 (2019)	AD	Retrospective CS	MTX	15.3	Unk	55 (25/30)	10.6 [3.0-19.5]	AZA (3), CSA (6), MPA (3), MTX (5), UVB (21)	Unk [0.37 - 0.45 (Or)/ - 0.37 - 0.5 (sc) mg/kg] (1)
Baum, 97 (2019)	AD	Retrospective Co	MTX	Unk	Unk	19	Unk	Unk	Unk

Delcasso, 96 (2018)	AD	Retrospective Co	MTX	21	Unk	20 (8/12)	39	PT and/or CSA (15)	Unk: initial mean dose 21 mg
Deo, 62 (2014)	AD	Retrospective CS	MTX	9.5 [2–38]	Unk	31 (14/17)	Unk	TA (31), PT (15), OCS (9), Or A (14), other (1)	0-5 Y: 7.5 mg 6-14 Y: 10 mg 15-18 Y: 15 mg (all median)
Dvorakova~, 86 (2017)	AD	Retrospective CS	MTX	17.2 [5-33]	Unk [Unk-14]	47 (32/15)	Unk	AB (18), AZA (8), CSA (8), NB-UVB PT (4), IVIG (1), SCS (16)	3.4 mg/kg
El-Khalawany, 64 (2013)	AD	Randomized head-to-head trial	MTX (20) CSA (20)	3 [Unk]	3 [Unk]	20 (12/8)	MTX: 11.2 [8-14]	TA (40), PT (Unk)	MTX: 7.5 mg [Unk],
Gerbens+, 88 (2018)	AD	Open-label observational follow-up study	MTX (17) AZA (18)	Unk [Unk-60]	Unk	17 (10/7)	43.3	AZA (1), CSA (1)	Unk [10-22.5 mg]
Goujon, 94 (2006)	AD	Retrospective CS	MTX	Unk [1-30]	Unk	20 (10/10)	26.3 [17-68]	Em (Unk), TCI (Unk), TCS (Unk)	Unk [7.5-25 mg]
Goujon, 29 (2017)	AD	RCT	MTX (50) CSA (97)	6	Unk	50 (28/22)	32	TCI or TCS (50)	Unk [15 - 25 mg]
Hegazy, 85 (2017)	AD	Retrospective Co	MTX	6	Unk	37	Unk	Unk	Unk [15-20 mg]
Ho, 22 (2018)	AD	Retrospective CS	MTX	Unk	>18	>300	Unk	Unk	15 mg
Knopfel, 57 (2018)	AD	Retrospective CS	MTX	12.6	Unk	28 (24/4)	7.8 [2-18]	AZA (1), CSA (6), Or AB (Unk), OCS (21), TCS (28), T AB (Unk)	Unk [0.2 - 0.5 mg/kg]
Lyakhovitsky, 55 (2010)	AD	Retrospective CS	MTX	Unk [2-3]	Unk [2-24]	20 (12/8)	51.8 [20-85]	AH, CSA (3), PT (11), SCS (15), TCS	Unk [10-25 mg]
Mittal, 93 (2011)	AD	CS	MTX	Unk [12-Unk]	Unk	15 (10/5)	Unk [30-60]	Unk	Unk [10-15 mg]
Politiek, 98 (2016)	AD	Retrospective CS	MTX	7.4	Unk [Unk-2]	89 (53/36)	50.7	Or immunosuppressive drugs (62)	13.6 mg [5-25]
Purvis, 52 (2019)	AD	Retrospective CS	MTX	17 (median)	29	43 (21/22)	Unk [2-16]	CSA (2), PT (2), Pred (1), Systemic treatment (5)	0.3 mg/kg (median)
Rahman, 91 (2014)	AD	Retrospective CS	MTX	12	Unk	30	8 [2-17] (median)	TA (30)	0.5 mg/kg [Unk-15]
Roekevisch+, 43 (2018)	AD	Open-label observational follow-up study	AZA (18) MTX (17)	Unk [Unk-24]	Unk	17 (10/7)	43.3	Unk	14.5 mg [10-22.5]
Schram, 44 (2011)	AD	RCT	AZA (22) MTX (20)	3	3	20 (10/10)	43	CSA (Unk)	17.5 - 20 mg (week 12 and week 24)
Shah, 31 (2018)	AD	Retrospective Co	MTX	36.8 [1-132]	Unk	41 (22/19)	45 [19-90]	AB (3), AZA (7), CSA (5), IM CS (12), MMF (1), MTX (3), OCS (17), other (1), PT (11)	Unk [7.5-25 mg]
Syed, 92 (2009)	AD	Prospective CCS	Placebo (30) MTX (30)	3	Unk	30	Unk	Unk	0.1 mg/kg [5-7.5]
Taieb, 90 (2019)	AD	Retrospective CS	MTX	14 (median)	25 (median)	26 (13/13)	12 (median)	CS (12), other systemic immunosuppressive (4), PT (23)	Unk [0.3-0.6 mg/kg]

Vedie, 95 (2016)	AD	Retrospective Co	MTX	20.4 - 27.9	57.8	35	Unk	AZA, TCS (No.Unk)	Unk [15-20 mg]
Weatherhead, 89 (2007)	AD	Prospective CS	MTX	6	3	12 (7/5)	37	TCS (12)	Unk [5-22.5 mg]
Zoller, 70 (2008)	AD	Retrospective CS	MTX	3-28	Unk	9 (6/3)	75 [52-85]	CSA (Unk), PT (Unk), SCS (Unk), TCI (Unk), TCS (9)	Unk [5-20 mg]
Roberts, 46 (2010)	AD, NE	Retrospective CS	MTX	10.5 [3-30]	9 [1-22]	25	7 (3-16)	MTX (90)	Unk [5-15 mg]
Patel, 154 (2018)	All CE	Retrospective Co	MTX	Unk [3.2-53.1]	Unk	32	Unk	Unk	Unk [Unk-30 mg]
Kalyoncu, 153 (2016)	AO SD	Retrospective Co	CS+MTX (117) CS+HCQ+MTX (85)	Unk	Unk	Unk	Unk	Unk	Unk
Bakker, 48 (2013)	BP	Retrospective CS	MTX	4	26.4 [3-96]	6 (Unk)	Unk	Unk	Unk [5-15 mg]
Bara, 100 (2003)	BP	CS	MTX	Unk	11.4 [4-23]	16 (7/9)	84.6	Unk	Unk [10-15mg]
Dereure, 101 (2002)	BP	Prospective CS	MTX	Unk [2-Unk]	Unk [6 - Unk]	18 (7/11)	77.8	Potent TCS 2-3 wks (18)	Unk [7.5-12.5 mg]
Du-Thanh, 99 (2011)	BP	Retrospective CS	MTX	8.48 [1-18]	Unk	70 (30/40)	82.7 [50-97]	Unk	9.8 mg
Heilborn, 63 (1999)	BP	Prospective CS	MTX	Unk [3-24]	24	11 (4/7)	81 [73-91]	TCS (Unk)	Unk [5-12.5 mg]
Kjellman, 102 (2008)	BP	Retrospective CCS	MTX (61) MTX+pred (37)	Unk	26 (median) [0.5-77]	98 (39/59)	Unk	Unk	Unk [2.5-17.5 mg]
Kremer, 104 (2017)	BP	Retrospective CS	MTX	Unk	Unk	6	Unk	CS (Unk)	Unk
Kwatra, 36 (2013)	BP	Retrospective CS	MTX	25.3	Unk [20.4-66]	16 (8/8)	71.4 [30-94]	Unk	Unk [2.5-15 mg]
Paul, 104 (1994)	BP	Retrospective CS	MTX	Unk [10-39]	Unk [10-44]	8 (4/4)	73.5 (63-87)	AB (3), TCS (3), SCS (8)	Unk [5-20 mg]
Click, 107 (2013)	DM	Retrospective CS	MTX	Unk [4-Unk]	Unk	8 (0/8)	39 [25-60]	IVIG (1), MPA (2), HCQ (6), AZA (1)	Unk [15-25 mg]
Hornung, 28 (2012)	DM	Retrospective CS	MTX	Unk [2-3]	Unk	11 (3/8)	61 [46-84]	SCS (11), AZA (4), MPA (1)	14.91 mg
Kasteler, 26 (1997)	DM	Retrospective CS	MTX	Unk [3-22]	Unk	13 (0/13)	48 [22-77]	AZA (1), Chlorambucil (1), CQ (7), HCQ (6), Pred (2), Quinacrine (2)	18.5 mg [2.5-30] (mean maximal dose)
Ramanan, 106 (2005)	DM	Retrospective Co	MTX	45.5 (median)	48	31 (11/20)	8.4	Unk	15 mg/m^2
Ruperto, 105 (2016)	DM	RCT	Pred (47) Pred+CSA (46) Pred+MTX (46)	Unk	35.5 (median)	46 (16/30)	Unk	Pred (3)	15-20 mg/m2
Zieglschmid, 108 (1995)	DM	Retrospective CS	MTX	1.8-68.5	Unk	10 (1/9)	Unk [27-79]	Pred (8)	8 mg (mean initial) - 15.92 (max)

Chen, 109 (2016)	E	Co	MTX	22 [2-93]	Unk	41 (27/14)	49 [18-83]	PT (14), CSA (30), MPA (9), AZA (7)	Unk [10-25 mg]
Shaffrali, 110 (2003)	E	Retrospective CS	MTX	Unk [3-18]	Unk	5 (2/3)	74.4 [67-83]	AZA, OCS, PT, TCS (No. Unk)	Unk [2.5-12.5 mg]
Tétart, 49 (2011)	E	Retrospective CS	MTX	2.6	12	15 (11/4)	78	CSA (1), Pred (1), PT (5), TCS (15), TA (3)	9.7 mg
Berianu, 111 (2015)	EF	Retrospective CS	MTX	31.4 [12-84]	Unk [12-36]	16 (8/8)	52 [30-75]	Pred (13), AZA (3), HCQ (2)	Unk
Lebeaux, 112 (2012)	EF	Retrospective CS	MTX	24.7 [5-93]	Unk	12	Unk	OCS (12)	Unk [15-30 mg]
Mertens, 45 (2016)	EF	Prospective Co	MTX	5	Unk	12 (1/11)	Unk [37-69]	MTX (6), SCS (6)	288 mg/kg/month (median)
Kroft, 71 (2009)	EF/M/SS	Retrospective Co	MTX (47) MTX+CST (11)	Unk [10-16]	Unk	58 (18/40)	40 [13-67]	AB (7), antimalarials (5), AZA (1), Em (3), isotretinoin (3), penicillamine (5), PT (4), TCS (16), TCA lesional injection (1)	Unk [15-25 mg]
Hossain, 155 (2013)	ENL	Prospective CS	MTX	Unk [24-30]	24	9 (7/2)	34 [23-52]	Clofazamine (9), Pred (9)	7.5 mg
Naka, 53 (2018)	GA	Retrospective Co	MTX	Unk [Unk-60]	Unk [Unk-72]	11 (2/9)	60.7	Ada, AZA, dapson, kenalog injections, PT, SCS, TA, TCS, UVB (No. Unk)	Unk [12.5-15 mg]
Politiek, 156 (2016)	HE	Retrospective Co	MTX	4.6	Unk [Unk-2]	42 (29/13)	53.2	Systemic treatment (7)	Unk [5-20 mg]
Arfi, 115 (1995)	LE	CS	MTX	Unk [1-24]	Unk	16	33 [16-48]	Unk	Unk [7.5-10 mg]
Böhm, 33 (1998)	LE	Retrospective CS	MTX	Unk [1-12]	Unk	12 (6/6)	53 [28-86]	AZA (1), CQ (5), SCS (9), TCS (2)	Unk [10-25 mg]
Böhm, 116 (2003)	LE	Retrospective CS	MTX	Unk [0.25-25]	27.9 [6-62]	22 (9/13)	46.5 [27-74]	Pred, antimalarials (No. Unk)	Unk [10-30 mg]
Carneiro, 113 (1999)	LE	RCT	MTX (20) Placebo (21), 28 with skin involvement	6	Unk	41 (2/39)	32.1	Antimalarial, immunosuppressive	Unk [15-20 mg]
Fruchter§, 117 (2017)	LE	Retrospective CS	MTX	Unk	58	27	Unk	HCQ sulphate (No. Unk), antimalarial (No. Unk)	16.6 mg
Gansauge, 54 (1997)	LE	Prospective CS	MTX	6	Unk	10	Unk	Antimalarials, Pred (No. Unk)	15 mg
Islam, 114 (2012)	LE	RCT	MTX (13) CQ (29)	6	6	13 (0/13)	24	Unk	10 mg
Kan, 118 (2016)	LE	Retrospective Co	MTX	Unk	48	27	Unk	None	Unk
Wenzel, 119 (2005)	LE	Retrospective CS	MTX	25.6 [2-67]	Unk [Unk-24]	43 (13/30)	52 (19-86)	TA (43), antimalarials (31), AZA (6), dapsone (2), MMF(4)	Unk [7.5-20 mg]
Chauhan, 120 (2018)	LP	Prospective CCS	MTX (15) MTX + TCA (15)	Unk [≤ 4]	Unk [≤ 8]	30 (9/6, MTX), (8/7, MTX + TCA)	MTX: 46.33 [40-52] MTX + TCA: 45.53 [36-55]	Unk	Unk [Unk - 0.3 mg/kg]
Ilyas, 39 (2016)	LP	Prospective Co	MTX	3	3	55 (23/32)	37 [22-65]	Unk	15 mg

Kanwar, 38 (2013)	LP	Prospective CS	MTX	Unk [Unk-24]	3	24 (8/16)	37.4 [9-63], 2 children [Unk]	Unk	Adults: 15 mg, children 0.35 mg/kg
Lajevardi, 27 (2016)	LP	Prospective CS	MTX	3	3	18 (5/13)	53.8 [30-65]	MMF (4), SCS (11), TCI (3), TCS/IL CST (13)	15 mg
Malekzad, 32 (2012)	LP	Prospective Co	MTX	Unk [8-Unk]	6	18 (8/10)	51.1 [22-80]	Unk	Unk [≤10 mg]
Torti, 121 (2007)	LP	Retrospective CS	MTX	Unk	27	18	Unk	Unk	Unk [2.5-12.5 mg]
Turan, 122 (2009)	LP	Retrospective CS	MTX	Unk [1-4]	6	11 (3/8)	44.2 [27-55]	SCS (4), TCS (7)	Unk [15-20 mg]
Kortekangas-Savolainen, 123 (2007)	LP, vulvovaginal	Retrospective CS	MTX	Unk [6-36]	Unk [12-48]	5 (0/5)	57.6 [45-65]	Repeated vaginal dilatations (5), TAC (2), tetracycline (1), TCS (2)	7.5 mg
Babahosseini, 124 (2019)	LPP	Retrospective CS	MTX	Unk	Unk	30	Unk	Unk	Unk
Bakhtiar, 127 (2018)	LPP	RCT	MTX (79) OCS (79)	2 [Unk]	Unk	79 (47/32)	Unk	Unk	10 mg
Bulbul baskan, 125 (2017)	LPP	Retrospective CCS	MTX (10) CSA (6)	Unk [3-6]	Unk	10 (2/8)	Unk	Unk	Unk [10-15 mg]
Kerkemeyer, 126 (2018)	LPP	Retrospective CS	MTX	Unk	Unk	7	Unk	Unk	Unk
Naeini, 128 (2017)	LPP	RCT	HCQ (14) MTX (15)	6	Unk	15 (2/13)	44.9	Ac (2), CSA (4), isotretinoin (2), pioglitazone (1) SCS (8), TCS (15)	15 mg
Karadag, 163 (2018)	LS	Prospective CS	MTX	12.6 [3-18]	10.6 [6-17]	6 (0/6)	53 [46-63]	Ac (2), Colchicine (3), TCS (6), UVA (2), NB UVB (1)	7.5 mg
Kreuter, 164 (2009)	LS	Retrospective CS	MTX	>6	4.7 [3-8]	7 (1/6)	67.6 [50-80]	Ac (1), NB-UVB PT (1), penicillin (3), T calcipotriene (1), TCS (7), UVA PT (3), PUVA (2)	15 mg
Fernandez-de-Misa, 157 (2018)	LyP	Retrospective CS	MTX	Unk	52 [1-277] (median)	51	Unk	Unk	Unk [≤20 mg]
Bulur, 129 (2017)	M	Retrospective CS	MTX	Unk	5	14	Unk	Colchicine, SCS, TCS (No. Unk)	Unk
Christen-Zaech, 35 (2008)	M	Retrospective CS	MTX	19.9 [3-52]	Unk	39	9.8	Unk	Unk [0.3-0.5 mg/kg till 35 mg/wk]
Cox, 61 (2008)	M	Retrospective CCS	MTX (9) CSA (1)	23 [10-36]	Unk	9	7.4 [4-16]	D-penicillamine (2), CSA (2), SCS 30 mg/kg/d, 3 d/mo for 3 mo (10)	0.3 mg/kg
Fitch, 67 (2006)	M	Retrospective CS	MTX	4-7	>6	17 (6/11)	7.3	TCI (2), TCS (11), T vit D (11)	Unk [12.5-25 mg]
Koch, 41 (2013)	M	Retrospective CS	MTX	19.6 [5.8-52.8]	55.2 [11.3 -162]	17 (9/8)	15.2 [4-25]	Unk	9.12 mg [2.5-15]
Kreuter, 135 (2005)	M	Prospective CS	MTX	9.8 [6-25]	>6	15 (6/9)	50.7 [18-73]	Penicillin (7), PUVA (6), SCS (4), TCS (3)	15 mg

Li, 130 (2019)	M	Prospective Co	MTX mono (12) MTX with iv Cst (23) MTX with OCS (9)	12	Unk	44 (13/31)	12.6	Systemic treatment (7)	Unk [1 mg/kg, max 25 mg]
Mertens, 65 (2016)	M	Retrospective Co	MTX	12.3 [1-65.3]	Unk	107 (30/77)	Unk	Unk	15 mg [5-26.9 mg]
Mirsky, 131 (2012)	M	Retrospective Co	MTX	28.8	Unk [7.3-7.0]	90 (32/58)	10.2	MTX (90)	Unk [Unk-15 mg]
Piram, 132 (2013)	M	Retrospective CS	MTX	24	Unk	24	Unk	Unk	0,5 mg/kg
Platsidaki, 50 (2017)	M	Retrospective CS	MTX	Unk [Unk-12]	21	20 (3/17)	Unk	HCQ (3), penicillamine (2), PUVA (20), SCS (20), TCI (20), TCS (20), vit D analogues (20)	15 mg
Rattanakaemakorn, 69 (2017)	M	Retrospective CS	MTX	Unk [2-Unk]	Unk [7-33.6]	7 (3/4)	11.8	TCS (1)	Pediatric dose; Unk [2.5 mg-Unk], adult dose; Unk [10 mg-Unk]
Seyger, 136 (1998)	M	Prospective CS	MTX	6	0	9 (2/7)	47.8 [34-71]	Systemic treatment, TA (No. Unk)	Unk [15-25 mg]
Shahidi, 42 (2018)	M	CS	MTX	18	Unk	33 (5/28)	29 [10-61] (median)	Unk	Unk [15 mg-Unk]
Torok, 30 (2012)	M	Prospective Co	MTX	36	36.4	36 (11/25)	7.9	CSA (2), MTX (1), TA (25)	1 mg/kg
Uziel, 133 (2000)	M	Prospective CS	MTX	Unk [2-13]	Unk [8-30]	10 (4/6)	6.8 [2-12]	D-penicillamine (1), naproxen (1), Pred (2), TCS (1)	Unk [0.3-0.6 mg/kg]
Weibel, 134 (2006)	M	Retrospective CS	MTX	Unk	35	34 (11/23)	8.2 [2.3-15.2]	PT (1), systemic therapy (1), TCS (10)	Unk [10-12.4 mg/m2]
Wlodek, 137 (2018)	M	Retrospective CS	MTX	Unk	Unk	8 (0/8)	62 (52-69) (median)	Bath PUVA (3), HCQ (3), Pred (3), TL-01 (1)	Unk [2.5-30 mg]
Zulian, 51 (2011)	M	RCT	MTX (46) Placebo (24)	Unk [Unk-12]	40.3 [3-72]	46 (34/12)	9	Antimycotics/AB (13), CSA (1), D-penicillamine (6), TCS (22)	15 mg/m2 [Unk-20 mg]
Zulian±, 56 (2012)	M	Prospective Co	MTX	27.5 [Unk - 72]	Unk	65 (16/42)	9.4 [Unk]	Antimycotics/AB (13), CSA (1), D-penicillamine (6), TCS (22)	15 mg/m2 [Unk-20 mg]
Torrelo, 158 (2017)	Pa	Retrospective CS	MTX	Unk [3-Unk]	Unk	5 (1/4)	4.3 [1.5-8]	Unk	Unk [0.3-0.4 mg/kg)
Moustafa, 159 (2015)	PD	Retrospective CS	MTX	14.5 [2-65]	65	12	63.5 (median)	Anti-pruritics (6), doxepin (2), neurontin (1), Pred (7)	Unk [2.5-10 mg]
Rivitti, 23 (1973)	PF	Retrospective CS	MTX	Unk	Unk	8 (2/6)	24	MTX (8), OCS (Unk)	Unk [20-37.5 mg]
Spring, 160 (2014)	PN	Retrospective CS	MTX	Unk [2-24]	Unk	13 (4/9)	75.8	Antipruritic agents, PT, TCS (No. Unk)	Unk [7.5-20 mg]
Egan, 24 (1999)	PPP	Retrospective CS	MTX	Unk [1-Unk]	Unk [1-Unk]	5 (4/1)	50 [39-62]	SCS (4), TCS (5), PUVA (3), CSA (1), ET (1)	Unk [12.5-22.5 mg]
Klejtman, 162 (2018)	Pr	Retrospective CS	MTX	Unk	16 [2-108] (median)	39 (16/23)	62 [28-94] (median)	Ac (4), AH (34), AZA (1), Capsaicin (1), CSA (4), Em (28), HCQ (1), MMF (1), Naltrexone (2), O CS (3), Pregabalin (5), PT (22), T TAC (10), TCS (38), Thalidomide (9)	15 mg [5-25]

Sharma, 161 (2007)	PrD	Retrospective CS	MTX	Unk [6-Unk]	Unk	7	Unk	TCS (7), sunscreens (7)	15 mg
Allison, 138 (2002)	PRP	CS	MTX	Unk	Unk	5	Unk	Unk	Unk
Chapalain, 139 (1999)	PRP	Retrospective CS	MTX	12.1 [4.5-19.5]	Unk	5	67 [45-87]	AC (2), TCS (5), PUVA therapy (1)	Unk [15-25 mg]
Dicken, 140 (1994)	PRP	CS	MTX	6 [2-12]	Unk	8 (5/3)	Unk [35-74]	Vit A (3), isotretinoin (3)	Unk [10-25 mg]
Knowles, 141 (1970)	PRP	Retrospective CS	MTX	Unk [4-7]	Unk	6 (6/0)	48.3 [40-60]	Pred (2)	Unk [2.5-5mg/d till 75mg/wk]
Baum, 34 (2012)	PV	Retrospective CS	MTX	31 [6-96]	Unk [6-30]	30 (6/24)	54 [35-78]	AZA (18), dapsone (14), CSA (3), CP (2), MPA (1), IVIG (2)	15 mg
Lever, 142 (1972)	PV	CCS	Pred -> MTX (15) MTX -> pred (9)	Unk [10-106]	Unk	24	51.2 [20-79]	Pred, MTX (No. Unk)	Unk
Mashkilleyson, 143 (1988)	PV	CS	MTX	Unk	Unk	53	Unk	Unk	Unk [25-50 mg (also in daily dosage)]
Peck, 25 (1971)	PV	Retrospective CS	MTX	Unk	Unk [4-204]	13 (3/10)	Unk [18-76]	CST (13)	Unk [10-50 mg]
Smith, 144 (1999)	PV	Retrospective CS	MTX	3	Unk [6-Unk]	9 (8/1)	59	AZA (Unk), CP (Unk), Pred (9)	Unk [7.5-17.5 mg]
Tran, 40 (2013)	PV	Retrospective CS	MTX	Unk [3-Unk]	Unk [26-Unk]	23 (11/12)	54	AZA (3), dapsone (2), etanercept (1), IVIG (2), MMF (7), Pred (23), rituximab (2)	Unk [7.5-35 mg]
Lower, 145 (1995)	Sar	Prospective CS	MTX	Unk [24-Unk]	Unk [Unk-84]	22	39	Antimalarial agents (Unk), nonsteroidals (Unk), Pred (3)	Unk [≤15 mg]
Veien, 146 (1997)	Sar	Co	MTX	23 [1-72]	Unk	16	51 [36-68]	Unk	Unk [Unk-25 mg]
Schanz, 72 (2013)	Scl	Prospective Co	MTX	Unk	Unk [6-12]	22 (6/16)	52 (median)	Unk	15 mg
Breuckmann, 73 (2005)	SD	Retrospective CS	MTX	6	Unk	7 (5/2)	56 [39-65]	Unk	25 mg
Herrick, 147 (2017)	SS	Prospective Co	MTX (65) MMF (118) CP (87)	24	Unk	65 (15/50)	Unk	Unk	Unk [20-25 mg]
Pope, 150 (2001)	SS	RCT	MTX (35) Placebo (36)	12	18 (median)	35 (4/31)	47	CST (10)	Unk [10-17.5 mg]
Sumanth, 148 (2007)	SS	Prospective CS	MTX	Unk [6-12]	Unk	33 (4/29)	31 [17-51]	Unk	15 mg
Van den Hoogen, 149 (1996)	SS	RCT	MTX (17) Placebo (12)	24	24	17	52 [32-75]	Colchicine (1), penicillamine (10), Pred (7), NSAID's (6)	15 mg
Leducq, 151 (2019)	Ur	RCT	MTX (39) Placebo (36)	4.5	2	39 (11/28)	46.4	Colchicine (8), corticosteroids (22), montelukast (19)	Unk [0.2-0.25 mg/kg]
Perez, 66 (2010)	Ur	Retrospective CS	MTX	Unk	Unk	16 (5/11)	49 [30-75] (median)	AZA (9), colchicine (4), CSA (14), doxepin (6), H1-AH (16), HCQ (6), IVIG (3), montelukast (12), sedating AH (13), Sul/Dapsone (7)	Unk [10-15 mg]

Sagi, 58 (2011)	Ur	Retrospective CS	MTX	4.5	8.3	8 (2/6)	8	AH (8), colchicine (Unk), dapsone (Unk), doxepin (Unk), IV hydrocortisone (4), Or Pred (1)	15 mg
Sharma, 152 (2014)	Ur	RCT	MTX (14) Placebo (15)	3	3.5 [0.5-9]	14 (6/8)	34.21	AH (14)	15 mg
AlGhamdi, 37 (2013)	Vi	Prospective CS	MTX	6	9	6 (4/2)	29	Unk	25 mg
Singh, 47 (2015)	Vi	Randomized comparative study	CST (25) MTX (25)	8	Unk	25	38.6	Unk	10 mg

~ 4 patients (AB 3, AZA 1, CSA 1) received concomitant systemic medication. Since this number is low compared to the total number of patients, we still included this study.
§ This study reported an inconsequent number of patients; 26 patients participated, but from 23 patients AE's were reported and from 19 patients effectiveness was reported.
+ Follow-up study from Schram (2011)
± Follow-up study from Zulian (2011)
AA: Alopecia areata, AB: Antibiotics, Ac: Acitretin, AD: Atopic dermatitis, AH: Antihistamines, All CE: Allergic Contact Eczema, AO: Adult onset, AZA: Azathioprine, BP: Bullous pemphigoid, CCS: Case-control study, Co: Cohort study, CP: Cyclophosphamide, CQ: Chloroquine, Cry: Cryotherapy, CS: Case series, CSA: Ciclosporin, CST: Corticosteroids, D: Day, DM: Dermatomyositis, DPCP: Diphenciprone, DTN: Dithranol, E: Eczema, EF: Eosinophilic fasciitis, Em: Emollients, ENL: Eythema Nodosum Leprosum, ET: Etretinate, FA: Folic acid, G: Gram, GA: Granuloma Annulare, GD: Gastroduodenal, GCS: Glucocorticosteroids, GI: Gastrointestinal, GPA: Granulomatosis with polyangiitis (Wegener's granulomatosis), HCQ: Hydroxychloroquine, ICS: Intravenous corticosteroids, IL: Intralesional, IV: Intravenous, IVIG: Intravenous immunoglobulin, LE: Lupus erythematosus, LP: Lichen planus, LPP: Lichen planopilaris, LS: Lichen Sclerosus (extra genital), LyP: Lymphomatoid papulosis, M: Morphea, mg: milligram, MMF: Mycophenolate Mofetil, MNX: Minoxidil, Mo: Month, MP: Methylprednisolone, MPA: Mycophenolate acid, MPP: Methylprednisolone pulse, MTX: Methotrexate, NA: Not applicable, NB: Narrow band, Or: Oral, OCS: Oral Corticosteroids, Pa: Panniculitis, PD: Papular Dermatitis, Ped: Pediatric, PF: Pemphigus Foliaceus, epidemical, fogo selvage, PPP: Palmoplantar pompholyx, PN: Prurigo Nodularis, Pred: Prednisone, Pr: Prurigo, PrD: Parthenium Dermatitis, PRP: Pityriasis rubra pilaris, Pt: Patient, PT: Phototherapy, Pts: Patients, PUVA: Psoralen – ultraviolet-A, PV: Pemphigus vulgaris, RCT: Randomized Controlled Trial, Sar: Sarcoidosis, Sc: Subcutaneous, SCS: Systemic corticosteroids, Scl: Scleroderma, SD: Sclerodema diabeticorum, Sul: Sulfasalazine, SS: Systemic sclerosis, T: Topical, TA: Topical agents, TAC: Tacrolimus, TCA: Triamcinolone, TCI: Topical calcineurin inhibitor, TCS: Topical corticosteroids, Unk: Unknown, Ur: Urticaria, UVA: Ultraviolet-A, UVB: Ultraviolet-B, Vi: Vitiligo, Vit: Vitamin, Wk: Week

Table S2 Efficacy/effectiveness of all included studies

Author, reference (year of publication)	Disease	Efficacy/ effectiveness~	Time to effect, wk	Mean duration of remission [range], mo	Concomitant medication (no. of patients)	AE's (no. of events)	SAE's (no. of events)
Chartaux, 74 (2010)	AA	Complete hair regrowth: MTX+CST: 12/19 MTX: 8/14	12	Unk	CST 10-20 mg/d (19)	Elevated liver enzymes (4), lymphocytopenia (1), persistent nausea (2) **(patients)**	None
Alkeraye, 77 (2017)	AA	Responders (≥ 50% regrowth): 9/14 (Pred + MTX), 2/6 (pred)	4	Unk	Pred 500 mg/d; 3 ds/mo	None	None
Anuset, 78 (2016)	AA	Total hair regrowth (100%): 15/26 Partial hair regrowth (50-100%): 6/26 Regrowth failure (<50%): 5/26	12	27 [6-72]	Pred 20 mg/d (23), "prophylactic osteoporosis treatment"	Acne (2), elevated liver enzymes (4), pneumocystois pneumonia (1), steroidinduced cataract (1), weight gain (4) [both MTX and Pred] **(patients)**	None
Chong, 79 (2017)	AA	Good response (≥ 50% hair regrowth): 6/14	8	Unk	OCS 10 mg/kg/d, 3 d/mo for 3 mo	Abdominal discomfort (Unk)	None
Droitcourt, 60 (2012)	AA	Total or partial regrowth (after 12 mo): 14/20 Total regrowth (after 18 mo): 10/14 Partial regrowth (after 18 mo): 4/14	10 (median)	Unk	IV Pred 500 mg/d, 3 d/mo for 3 mo, FA 5 mg	Nausea (2), neutropenia (1) **(patients)**	None
Firooz, 80 (2013)	AA	Regrowth of terminal hairs: 8/10	7.2	Unk	OCS (10)	Acne (2), amenorrhea (1), anemia (1), herpes infection (1), hypertension (1), muscle cramp (2), weight gain (1)	None
Hammer- schmidt, 75 (2014)	AA	>50% regrowth: 21/31	Unk	6.3 mo (3)	IL CST, MNX, SCS	Elevated liver enzymes (2), leukopenia (3), nausea, epigastric pain and diarrhoea (3)	None
Joly, 81 (2006)	AA	Complete regrowth: Pred+MTX: 11/16 MTX: 3/6	Unk	Unk	Or Pred 10-20 mg/d (16)	Abdominal pain, nausea, vomiting (1)	Unk
Landis, 82 (2017)	AA	Complete response: 4/11	Unk	Unk	Pred (13)	Unk	Unk
Lim, 68 (2017)	AA	Complete response (100% regrowth): 14/29 Partial response 75-90% regrowth: 12/29 Poor response <50% regrowth: 3/29	Unk	Unk	FA (29)	Elevated liver enzymes (3), gastrointestinal discomfort (3), lymphopenia (1), reactivation of pulmonary tuberculosis (1)	Unk
Lucas, 59 (2016)	AA	Partial response 75-99% regrowth: 2/5 Poor response 25-49% regrowth: 1/5 No change or further loss: 2/5	Unk	Unk	FA (5)	Nausea (1)	None
Royer, 83 (2011)	AA	Regrowth >50%: 5/14 Regrowth <50%: 9/14	12-27	Unk	SCS (8)	Herpes zoster (1), nausea (1)	None
Thi Van, 76 (2019)	AA	Good response: 23/38 Medium response: 9/38 Poor response: 6/8	4	Unk	Pred 24 mg/d, 3 ds/week (38)	None	Unk
Vano-Galvan, 84 (2017)	AA	Complete response >75% regrowth: MTX: 0/10 MTX+Pred: 3/5 Partial response <75% regrowth: MTX: 5/10 MTX+Pred: 1/5	6.8 - 12	Unk [6.3-6.8]	Pred 0.5-1 mg/kg/d (5)	Elevated liver enzymes (4), weight gain (3)	None
Anderson, 87 (2019)	AD	IGA 0-5: 6-9 months FU: 2.9	< 8	Unk	TCS (51), nonsteroidal topicals (29)	Blurry vision (3), cellulitis (2), eczema herpeticum (1), fatigue (14), folliculitis (1), GI discomfort (17), headaches (9), low haematocrit and hemoglobin (2), molluscum (8), mouth	Unk

		12-15 months FU: 2.4 Final visit: 2.7				sores (3), ocular herpes simplex (1), ringworm (1), staphylococcus aureus superinfection (22), transient elevated liver enzymes (5), verruca vulgaris (1) **(patients)**	
Baum, 97 (2019)	AD	Disease severity 6 Months: mild 20; moderate 7; severe 3	Unk	Unk	FA 5 mg/d, CST	GI discomfort (3), alopecia (1)	None
Delcasso, 96 (2018)	AD	SCORAD 50: After 3 months: 7/14 After 6 months: 5/8 After 12 months: 9/12	Unk	Unk	EM +/- TCS (20)	GI discomfort (5), headache/weakness (5), hepatic cytolysis (3), infectious (3), lymphopenia (3) (**patients)**	None
Deo, 62 (2014)	AD	>50% persistent improvement: 75% **(patients)** SCORAD reduction (n=9): 16 points	8	Unk	FA 5 mg, 2d/wk, TCS, SAB or SCS (3)	Elevated liver enzymes (4), nausea (4)	Serious pyelonephritis needing hospitalization (1), viral-induced exacerbation of asthma needing hospitalization (1)
Dvorakova~, 86 (2017)	AD	Reduction disease severity: IGA decrease 2.35	11.3	Unk	AB (3), AZA (1), CSA (1), OCS (7)	Anemia, elevated liver enzymes, fatigue (17), hyperbilirubinemia, lymphocytopenia, nausea/vomiting/abdominal pain (14), neutropeania	Bullous impetigo (1), chest tightness/wheezing (1), hospitalization for community acquired pneumonia (1), poststreptococcal glomerulonephritis (1)
El-Khalawany, 64 (2013)	AD	MEAN absolute SCORAD reduction: MTX: 26.3 (12 wks), 24.9 (24 wks) CSA: 25.0 (12 wks), 21.0 (24 wks)	3-5	5	FA (20)	Abnormal renal function test (1), anemia (6), abnormal liver enzymes (5), fatigue (6), fever (1), flu-like symptoms (1), GI discomfort (9), headache (3), leukopenia (2),nausea and vomiting (4), Or ulceration (4), pancytopenia (1) **(patients)**	Unk
Gerbens+, 88 (2018)	AD	MEAN absolute SCORAD reduction: MTX: 32.1 AZA: 32.1	Unk	Unk	AB, TCI, TCS, OCS	Blood and lymphatic system disorders (14), cardiovascular disorders (6), ear and labyrinth disorders (4), gastrointestinal disorders (31), general and administration site conditions (25), hepatobiliary disorders (19), immune system disorders (1), infections (86), injury, poisoning and procedural complications (9), metabolism and nutrition disorders (1), musculoskeletal and connective tissue disorders (21), neoplasms (6), nervous system disorders (22), psychiatric disorders (3), renal and urinary disorders (6), reproductive system and breast disorders (2), respiratory, thoracic and mediastinal disorders (19), skin and subcutaneous tissue disorders (30), surgical and medical procedures (2)	Cholera (1), exacerbation of AD (1), myocardial infarction (2), respiratory problems (2), social reasons after trauma (1)
Goujon, 94 (2006)	AD	>70% improvement: 13/20	2-8	Unk	TCI, TCS	Elevated liver enzymes (2), lymphopenia (1), nausea (4)	Unk
Goujon, 29 (2017)	AD	SCORAD 50 after 8 weeks: MTX: 4/50 CSA: 18/43 SCORAD 50 after 24 weeks: MTX: 9/24 CSA: 22/31	Unk	Unk	Em, FA 5mg/d (50), TCI, TCS	Acne/virus papilloma (1), elevated liver enzymes (1), fatigue (6), gastrointestinal disorders (9), headache (1), infections (12), lymphocytopenia (1)	None
Hegazy, 85 (2017)	AD	Complete response: 8/37	Unk	Unk	Unk	Unk side effects (3)	Unk
Ho, 22 (2018)	AD	Excellent control: >75%	12-24	Unk	Em, TCI, TCS	Unk	Unk
Knopfel, 57 (2018)	AD	Complete/almost complete clearance: 10/28 Marked improvement: 13/28 Mild improvement: 4/28 No improvement: 1/28	Unk	Unk	FA (28), OCS (1), TCS (28),	Elevated liver enzymes (5), headache (1), nausea (6), vomiting (1)	None
Lyakhovitsky, 55 (2010)	AD	Responders: 16/20	9.95 (mean), 2-12 (range)	Unk	FA (20), SAH, TCS	Elevated liver enzymes (5), nausea (5), peripheral neuropathy (1)	None

Mittal, 93 (2011)	AD	Excellent response: 7/15 Good response: 3/15 Poor response: 5/15	Unk	Unk	SCS, TCS	None	None
Politiek, 98 (2016)	AD	PGA1, good effect: 38/89 PGA2, moderate effect: 28/89 PGA3, failure of treatment: 12/89 Excluded: 11/89	Unk	Unk	Prednisolone 10-30 mg/d (26)	Aggravation of rosacea (1), alopecia (1), concentration problems (1), condylomata acuminata (1), depressive discomfort (1), elevated liver enzymes (2), fatigue (4), folliculitis (1), flu-like discomfort (1), gastrointestinal complaints (6), headache (3), pneumonia (1), shortness of breath (1), vision changes (1)	Unk
Purvis, 52 (2019)	AD	A lot better: 23/43 Slightly better: 2/43 No change: 5/43 Excluded: 13/43	Unk	24 (median)	AB, AH, Em, FA 5 mg (43), TCS	Cataracts (1), gastrointestinal upset (4)	None
Rahman, 91 (2014)	AD	Good - excellent response: 23/30 No response: 7/30	12	Unk	Unk	Unk	Unk
Roekevisch+, 43 (2018)	AD	SCORAD reduction (ITT) MTX: 37.8 AZA: 32.6	Unk	Unk	FA, weekly 5 mg (17)	Blood and lymphatic system disorders (11), eye disorders (4), gastrointestinal disorders (26), general disorders and administration site conditions (22), hepatobiliary disorders (11), infections (52), injury, poisoning, and procedural complications (4), musculoskeletal and connective tissue disorders (16), neoplasm benign, malignant, and unspecified (3), nervous system disorders (2), renal and urinary disorders (6), reproductive system and breast disorders (2), respiratory, thoracic, and mediastinal disorders (1), skin and subcutaneous tissue disorders (26), surgical and medical procedures (2)	Exacerbations AD (1), hospitalization because of psychiatric comorbidity (1)
Schram, 44 (2011)	AD	MEAN absolute SCORAD reduction: MTX: 22.8 AZA: 21.7	Unk	Unk	FA 5 mg (20)	Abnormalities in blood count (6), exacerbation of their eczema (3), gastrointestinal complaints (11), infections (14), increased liver enzymes (7)	None
Shah, 31 (2018)	AD	Excellent improvement: >75% 38/41 Good improvement: 50-75% 2/41 Partial improvement: 25-50% 1/41	4-6	Unk	AB (14), CSA 150mg (1), FA 5mg/d, 6ds/week (41), IM TCA (17), tapering doses of Pred (2), valacyclovir (1)	Decreased hemoglobin (1), transient decrease in platelets (1), elevated liver enzymes (8), fatigue (3), nausea (5)	None
Syed, 92 (2009)	AD	EASI50: MTX: 30/30 Placebo: 0/30	Unk	Unk	Unk	None	Unk
Taieb, 90 (2019)	AD	IGA decrease at least 2 points: 14/26	Unk	Unk	SCS, TCS	Gastrointestinal discomfort (1), elevated liver enzymes (1), bone marrow suppression (3), mild fatigue (1)	Unk
Vedie, 95 (2016)	AD	Responders: 15/28 Non-responders: 12/28 Lost to follow-up: 1/28	Unk	Unk	AZA (7)	Asthenia (3), digestive disorders (4), hepatic dysfunction (7), infections (4), lymphopenia (2)	Folliculitis (1), herpetic recurrences (1)
Weatherhead, 89 (2007)	AD	MEAN SASSAD reduction: 19 units	3	Unk	Em, TCI, TCS	Elevated liver enzymes (2), herpes simplex (1), nausea (2)	None
Zoller, 70 (2008)	AD	Complete remission: 6/9 Significant improvement: 3/9	4-8	Unk	Em, FA (9)	Numbness (1)	Unk
Roberts, 46 (2010)	AD, NE	Clear: 16/25 Almost clear: 3/25 Ongoing: 3/25 Failed: 1/25 Lost to follow up: 2/25	42	Unk	FA, weekly 5 mg (25)	Generalized exanthema (1), lethargy (1), mild lethargy (2), nausea (4), transient mouth ulceration (1)	None

Patel, 154 (2018)	All CE	Complete clearance: 6/32 Partial clearance: 19/32 Failure: 6/32	Unk	Unk	Unk	Anemia (5), elevated creatinine (3), elevated liver enzymes (10), fatigue (5), gastrointestinal discomfort (7), leukopenia (2), thrombocytopenia (1)	None
Kalyoncu, 153 (2016)	AO SD	Remission with treatment: CST+MTX: 85/97 CST+MTX+HCQ: 68/81	Unk	18 (median)	CST 43.9 mg/d	Unk	Unk
Bakker, 48 (2013)	BP	Clinical remission: 5/6	16	Unk	FA 5mg/week (6)	Unk	None
Bara, 100 (2003)	BP	Complete remission: 14/16	Unk	3 (in 1 pt)	0.5% clobetasol, max 20 g/d (10)	Anemia, thrombopenia, colon ulcerations, pancytopenia **(events)**	None
Dereure, 101 (2002)	BP	Maintenance of complete clinical response: 17/18	Unk	7.8	TCS	Decrease in hemoglobin (6), weary (5) (**patients)**	None
Du-Thanh, 99 (2011)	BP	Complete clinical remission: TCS+MTX: 70/70 Maintenance of complete clinical remission: MTX: 53/70	Unk	2.5 [0.5-7]	Superpotent TCS (70)	Anemia (7), asthenia (1), depression (1), GD ulceration (3), interstitial pneumopathy (1), leukopenia (2), liver cytolysis (2), Or ulceration (2), pancytopenia (1), pulmonary embolism (1), respiratory tract infection (1), thrombocytopenia (2)	Death (6, 1 MTX related due to respiratory tract infection in a setting of MTX related pancytopenia). Other: Unk.
Heilborn, 63 (1999)	BP	Marked and rapid decrease in disease activity: 11/11	<1	>24	FA (3), TCS	Anemia (1), nausea and anorexia (1), pyoderma (2)	Unk
Kjellman, 102 (2008)	BP	Remission rate: MTX: 26/31 MTX+pred: 13/37	44-80	Unk	Pred (37)	Anemia (1), alveolitis (1), elevated liver enzymes (1) GI discomfort (2)	Unk
Kremer, 104 (2017)	BP	Disease control: 6/6	Unk	Unk	CST (6)	Unk	Unk
Kwatra, 36 (2013)	BP	Complete remission: 15/16	15.2	Unk	FA 1 mg/d, tapered pred 20-60 mg/d	GI intolerance (1), mild nausea and dyspepsia (2), worsening of anemia (1)	None
Paul, 104 (1994)	BP	Clearance and significant decrease in the need for systemic corticosteroids: 5/8	4-88	Unk	OCS (8)	Anemia (1), nausea (1), thrombocytopenia (1)	None
Click, 107 (2013)	DM	Substantial clearing/near response: 3/8	Unk	Unk	TCS (8)	Alopecia (1), leukopenia (1)	None
Hornung, 28 (2012)	DM	CDASI decrease: 8.6	Unk	Unk	FA 5mg/d (11), Pred 5-20 mg/d (9)	Abcess on injection place (1)	Herpes encephalitis (1), pancytopenia (1), urothelial carcinoma (1)
Kasteler, 26 (1997)	DM	CST sparing effect: 10/13	Unk	Unk	Or Pred (10)	Mild malaise (2), transient nausea (6)	Unk
Ramanan, 106 (2005)	DM	Median time to discontinuation prednisone: MTX: 10 mo Control: 27 mo	Unk	Unk	AZA (1), CSA (1), Cyclophosphamide (1), HCQ (6), IVIg (15), Pred 2m/g/kg/d (31)	Cellulitis of the metacarpophalangeal joint (1), elevated liver enzymes (6), fungal vaginitis (1), herpes zoster (1)	Unk
Ruperto, 105 (2016)	DM	PRINTO20 Pred: 51% Pred+CSA: 70% Pred+MTX: 72%	Unk	Unk	Pred 2 mg/kg, after induction phase tapered to 0.25 mg/kg (46)	Cardiac disorders (1), endocrine disorders (9), eye disorders (3), gastrointestinal disorders (9), general disorders and administration site conditions (2), infections and infestations (14), investigations (6), metabolism and nutrition disorders (4), musculoskeletal and connective tissue disorders (4), nervous system disorders (2), psychiatric disorders (4), skin and subcutaneous disorders (9), vascular disorders (1)	Dermohypodermitis (1), paronychia (1)
Zieglschmid, 108 (1995)	DM	Improvement of cutaneous disease: 9/10	Unk	Unk	OCS, Pred, sunscreens, TCS	Alopecia (1), gastrointestinal distress (2), abnormal liver biopsy (2), lung disease (1), leukopenia (1), mild hepatic fibrosis (2), stomatitis (3)	Unk
Chen, 109 (2016)	E	Control of disease: 15/41	Unk	Unk	Unk	Elevated liver enzymes (3), elevated creatinine (3), increased procollagen type III aminoterminal peptide (3), nausea (4) (**patients)**	None
Shaffrali, 110 (2003)	E	Successful response: 4/5 No successful response: 1/5	Unk	Unk	Prednisolone 5 mg/d (1)	Abdominal pain (1), flu-like illness (1), liver enzyme elevation (1)	Unk
Tétart, 49 (2011)	E	Complete response: no skin-lesions: 11/15 Partial response: still skin-lesions 4/15	Unk	Unk	FA 10 mg/week (12)	Malaise (1), renal insufficiency (1), stomach aches (2), transient lymphopenia (1)	Unk
Berianu, 111 (2015)	EF	Complete remission: 9/16	26	27.1 [7-36]	Pred (15)	Unk	Unk

Lebeaux, 112 (2012)	EF	Complete remission: 4/12	Unk	Unk	Pred (12)	Unk	Unk
Mertens, 45 (2016)	EF	MEDIAN difference modified skin score: 9	Unk	Unk	Analgesics, antiemetics, FA 5-25 mg/week, SCS ≤15 mg/d	Alopecia (4), gastrointestinal discomfort (9), mild stomatitis (5)	None
Kroft, 71 (2009)	EF/M/SS	Clinical improvement: MTX: 38/47 MTX+CS: 11/11	Unk	Unk	FA (not routinely and exact dose not indicated), SCS (6)	Unk	Unk
Hossain, 155 (2013)	ENL	Persistent remission: 9/9	4-8	Unk	Pred tapered from 30-40 mg/d (9)	Crusted scabies (1), extensive pityriasis versicolor (1), facial swelling (1), multiple folliculitis (2), weight gain (1)	None
Naka, 53 (2018)	GA	Complete resolution: 3/11 Partial resolution: 4/11 No improvement: 4/11	≥4	Unk	FA (11)	Diarrhoea (2), gastrointestinal upset (2), hair loss (2)	None
Politiek, 156 (2016)	HE	PGA1, good effect: 14/42 PGA2, moderate effect: 14/42 PGA3, failure of treatment: 9/42 Excluded: 5/42	Unk	Unk	OCS (7)	Fatigue (1), gastrointestinal complaints (3), headache (2), hematoma (1), suspicion of an allergic reaction to folic acid or MTX (1), urinary tract infection (1)	Unk
Arfi, 115 (1995)	LE	Improvement: 16/16	Unk	Unk	Pred 5-30 mg	Elevated liver enzymes (2) **(patients)**	None
Böhm, 33 (1998)	LE	Improvement: 10/12 Complete response: 6/12 Partial response: 4/12	2-6	5-24 (in 5 pts)	GCS systemic (6), TCS (3)	Elevated liver enzymes (3) **(patients)**	None
Böhm, 116 (2003)	LE	Complete response: 15/22 Clinical improvement: 21/22	8 [2-22]	Unk	FA 5 mg/d (Unk)	Elevated liver enzymes and vomitus (10)	None
Carneiro, 113 (1999)	LE	Presence of cutaneous lesions: MTX: 3/20 Placebo: 16/21	Unk	Unk	SCS <0.5 mg/kg/d	Diarrhoea (5), dyspepsia (9), elevated liver enzymes (31), infection (4), nausea (6), Or ulcer (6), urticaria (1), weakness (5)	Unk
Fruchter§, 117 (2017)	LE	≥50% improvement: 10/19	Unk	Unk	Unk	Adverse events, details unknown (6)	Unk
Gansauge, 54 (1997)	LE	Resolve of cutaneous lesions: 8/10	Unk	Unk	Pred, FA	Elevated liver enzymes (2), general malaise (4) **(patients)**	None
Islam, 114 (2012)	LE	Number of patients with skin rash: MTX: 0/13 CQ: 3/19	24	Unk	Unk	Anorexia and nausea (7), elevated liver enzymes (2)	None
Kan, 118 (2016)	LE	Both the MTX and AZA clusters appeared to have better clinical outcomes and lower total medical costs relative to CST monotherapy.	Unk	Unk	HCQ (Unk), OCS (Unk)	Unk	Unk
Wenzel, 119 (2005)	LE	Significant clinical improvement in CLAI: 42/43	0.5-2	Unk	Antimalarials (19), low dose prednisolone (18)	Elevated liver enzymes (23), fatigue (11), GI discomfort (22), infections (2), minor hair loss (2)	None
Chauhan, 120 (2018)	LP	Mean CSS reduction (%): MTX: 53.31 MTX + TCA: 83.53 Mean VAS reduction (%): MTX: 65.31 MTX + TCA: 93.29 Mean QLIQ reduction (%)	16	Unk	TCA 0.1% Or paste 3 times/d	Anemia (1), nausea (1)	None

		MTX: 80.26 MTX + TCA: 96.00					
Ilyas, 39 (2016)	LP	>50% clearance of cutaneous lesions: 35/55	Unk	Unk	FA 1mg/d (55)	Elevated liver enzymes (Unk), leukopenia (Unk), nausea (4)	Unk
Kanwar, 38 (2013)	LP	Complete remission: 14/24	2	Unk [3-Unk]	FA 5 mg/d, 2 D/Wk	Deranged liver function abnormality (4), marginal decrease in hemoglobin (6), reduced appetite (2)	Unk
Lajevardi, 27 (2016)	LP	TS score reduction: 2.06	Unk	Unk	FA 1mg/d (18)	Epigastric pain (1), nausea (1), pityriasis rosea (1)	Elevation of liver enzymes (1)
Malekzad, 32 (2012)	LP	Excellent improvement >75%: 12/15 Mild improvement <75%: 3/15 Unresponsive: 1/15	2	6	Em, FA 1 mg/d (18), SAH	Elevated liver enzymes (1), anemia (1)	None
Torti, 121 (2007)	LP	Substantial improvement: >75% clear 10/18 Moderate improvement 25-75% clear: 6/18 No response <25% clear: 2/18	Unk	Unk	Systemic antifungals, TCS, TAC	Unk	Unk
Turan, 122 (2009)	LP	Complete response: 10/11	4	Unk	Unk	Fatigue (1), nausea (1)	Unk
Kortekangas-Savolainen, 123 (2007)	LP, vulvovaginal	Long-term symptom relief: 6/6	Unk	6	TCS (3)	Hair loss (1), herpes simplex (1)	Unk
Babahosseini, 124 (2019)	LPP	Complete responders: 10/26 Partial responders: 12/26 Non-responders: 4/26	9	Unk	TCS (26)	Anemia (1), dizziness (1), ecchymosis (1), edema (1), erythema (2), fatigue (1), headache (1), hypertension (1), LFT rising (7), stupor (1)	Unk
Bakhtiar, 127 (2018)	LPP	Effective: 63/79	Unk	Unk	Unk	None	None
Bulbul baskan, 125 (2017)	LPP	Clinical response: MTX: 10/10 CSA 6/6	Unk	Unk	Unk	None	None
Kerkemeyer, 126 (2018)	LPP	Partial improvement: 1/7	Unk	Unk	Unk	Unk	Unk
Naeini, 128 (2017)	LPP	LPP Activity Index points decrease: MTX: 2.46 HCQ: 0.67	Unk	Unk	None	Elevated liver enzymes (1)	None
Karadag, 163 (2018)	LS	Median total clinical score reduction: 11.5	Unk	Unk	IV MP 1000mg/d, for 3 D	None	None
Kreuter, 164 (2009)	LS	Softening of sclerotic skin and elimination of signs of active disease: 14/15	Unk	>6	MP (15), Pred 5 mg/d (Unk)	Diabetes Mellitus (2), increase of glucose level (2), mild nausea and headache (3), weight gain (1)	None
Fernandez-de-Misa, 157 (2018)	LyP	Complete response: 25/51	Unk	Unk	Unk	Unk	Unk
Bulur, 129 (2017)	M	Clinical improvement: 14/14	Unk	Unk	Unk	None	None
Christen-Zaech, 35 (2008)	M	Less induration, violaceous coloration: 38/39	Unk	6 (in 3 pts)	OCS 0.5 - 1 mg/kg/d (34), FA 1 mg/d (39)	Elevated liver enzymes (1), GI discomfort (5) (**patients)**	None
Cox, 61 (2008)	M	Responders: 8/10	3 (median)	6 [2-12]	SCS 30 mg/kg/d, 3 d/mo (9), FA (10)	Hyperglycaemia, nausea, varicella zoster (1) **(patients)**	None
Fitch, 67 (2006)	M	Inactive lesions: 16/17	MTX: 24.4 , MTX+CST: 9.2	Unk	FA (19), OCS (12), TCS	Elevated glucose (1), elevated liver enzymes (1), weight gain (2), weight gain and mild cushingoid features (several)	Unk
Koch, 41 (2013)	M	Disease inactivity: 17/17	8.4	21	FA 1mg/d (17), Or Pred (9)	Unk	Unk

Kreuter, 135 (2005)	M	Decrease of clinical score: MD 6	12	None	MP (7)	Nausea (3), headache (3), elevation of liver enzymes (1)	None
Li, 130 (2019)	M	PGA-A, mLoSSI, LSCAM scores decreased in all groups 44/44, no significant differences in treatment failure between groups	Unk	Unk	Pred (32)	Blurred vision (1), gastrointestinal problems (11), hair thinning (1), infection (3), laboratory abnormalities (3), lip and nasal ulcer (1), medication intolerance (5), mood problems (5), seizure recurrence (1)	Dehydration/gastroenteritis (1)
Mertens, 65 (2016)	M	Stop due to disease remission: 48/107	Unk	Unk	FA (78), SCS (37)	Depression (1), fatigue (3), GI discomfort (7), haematotoxicity (2), headache (1), hepatotoxicity (5), pulmonary discomfort (3), renal impairment (1)	Unk
Mirsky, 131 (2012)	M	No disease relapses: 31/90	Unk	20.4	Unk	Unk	Unk
Piram, 132 (2013)	M	Significant disease improvement MTX+CST combined compared to MTX or CST alone: OR 5 (95% CI, 1.2-20.7)	Unk	Unk	Calcipotriene (29), HCQ (20), methylprednisolone 21 mg/kg (20), OCS 0,8 mg/kg (6), tacrolimus (14), TCS (33), UVB (3), vit A or vit E TA (Unk)	Headache, nausea	Unk
Platsidaki, 50 (2017)	M	Very good response: 6/20 Good response: 10/20 Fair response: 2/20 Failed treatment 2/20	≤12	Unk	FA (20), TA	Abdominal pain (4), elevated liver enzymes (1), nausea (4)	None
Rattanakaemakorn, 69 (2017)	M	Responders, improvement: 7/7	8	Unk	FA, daily (7)	Mild nausea (1)	Unk
Seyger, 136 (1998)	M	Significant improvement on MSS and VAS for tightness, no significant improvement on durometer and VAS for itching	Unk	Unk	Unk	Elevated liver enzymes (4), fatigue (2), nausea (2) stomatitis (3), weight loss (1)	None
Shahidi, 42 (2018)	M	mLoSSI, LoSDI and MRI: showed significant improvement	Unk	Unk	FA 1 mg/d, methylprednisolone 20-30 mg/kg/month	Alopecia (6), anorexia (1), fatigue (13), headache (5), hypokalaemia (8), leukopenia (2), nausea (11), striae rubrae (7)	None
Torok, 30 (2012)	M	Significant mLosSI improvement after 1.77 mo: 36/36	4.32	Unk	FA 1 mg/d(36), Pred 0.25-2 mg/kg/d (36)	Anticipator emesis (7), cushingoid facies (23), elevated liver enzymes (1), light striae (2), Or candidiasis (1)	None
Uziel, 133 (2000)	M	Inactive lesions: 9/11	08-52	Unk	D-penicillamine (1), IV MP (8), naproxen (1), Pred (3)	Elevated liver enzymes (1), leukopenia (1), nausea (1)	Unk
Weibel, 134 (2006)	M	Arrest of disease progression: 32/34	22.8	Unk	IV MP (34), CST	Abdominal discomfort (4), elevated liver enzymes (6), headache (3), lymphopenia (4), mouth ulcers (3), nausea (14)	None
Wlodek, 137 (2018)	M	Very well response: 4/8	Unk	Unk	Topical imiquimod (1)	Back pain (1), elevated liver enzymes (1), P3NP elevation (1), urinary symptoms (1)	None
Zulian, 51 (2011)	M	Decrease in target skin lesion activity MTX: -44.4% Placebo: -12.1%	Unk	Unk	FA (46), Pred 1mg/kg	Alopecia (2), fatigue (2), headache (5), hepatotoxicity (3), nausea (8)	None
Zulian±, 56 (2012)	M	Responders: 48/65 Relapse: 10/65 Lost-to-follow-up: 7/65	Unk	Unk [25.6-Unk]	FA (65)	Elevated liver enzymes (3), headache (7), nausea (16), transitory hair loss and fatigue (2)	None
Torrelo, 158 (2017)	Pa	Good control of active symptoms and signs and no reappearance of further attacks: 5/5	Unk	Unk	Pred 1 mg/kg/d (5)	Unk	Unk
Moustafa, 159 (2015)	PD	Disease control: 8	Unk	Unk	Unk	Diarrhoea (1), elevated creatinine (9), fatigue (1), hair loss (2), minimally reduces hemoglobin (1), solar purpura (2)	Unk
Rivitti, 23 (1973)	PF	Good response: 1/8 Slight improvement: 2/8 No improvement: 5/8	Unk	Unk	SCS, TCA 4-24 mg (8)	None	Death by bronchopneumonia (1)

Spring, 160 (2014)	PN	Decrease PNASI/PNRS >75%: 10/13 Tend to improvement: 2/13 Relapse: 1/13	Unk	Unk	Em, TCS	Fatigue (1), liver enzyme elevation (1), nausea (1), typical side effects (Unk)	Unk
Egan, 24 (1999)	PPP	CST sparing effect: 5/5	4	Unk	TCS (3), SCS (4)	GI discomfort (1)	None
Klejtman, 162 (2018)	Pr	Objective complete response: 16/28 Subjective complete response 19/28	9.6	19	Unk	Anemia (1), asthenia (1), cutaneous abscess (1), elevated liver enzymes (4), hair loss (1), hepatocarcinoma (1), gastrointestinal discomfort (2)	Unk
Sharma, 161 (2007)	PrD	MEAN DASI reduction: 7.9	Unk	Unk	Prednisolone ≤30 mg/d	Dermatophytosis (4), folliculitis (4), furuncles (4)	Unk
Allison, 138 (2002)	PRP	Poor response: 5/5	Unk	Unk	Unk	Unk	Unk
Chapalain, 139 (1999)	PRP	Significant improvement: 3/5 Complete clearance: 2/5	4	Unk	Unk	Cytolysis (1)	None
Dicken, 140 (1994)	PRP	Favourable response (clearing): 8/8	Unk	Unk	TCS	None	None
Knowles, 141 (1970)	PRP	Complete clearance: 6/6	4-40	Unk	TA	GI discomfort (1)	Unk
Baum, 34 (2012)	PV	Treatment response: 16/19	Unk	Unk	TA	Unk	Unk
Lever, 142 (1972)	PV	Freedom of lesions: Pred -> MTX: 7/15 MTX -> pred: 2/9	Unk	Unk [4-121]	Unk	Leukopenia (2)	None
Mashkilleyson, 143 (1988)	PV	Effective: 42/53 Not effective: 6/53 Further exacerbation of the disease: 3/53 Discontinue due to drug induced side effects: 2/53	0.36	Unk	SCS (53)	Gastric ulcer (3), herpes simplex (4), moniliasis (2), necrotizing gingivitis (Unk), pneumonia (8), pyoderma (4), TBC (3)	0-7 pts (exact number unclear)
Peck, 25 (1971)	PV	Lowering antibodies with a correlation with clinical activity: 13/13 Steroid sparing: 13/13	Unk	Unk	Calcium folinate (10), CST (13)	Gastrointestinal discomfort (1), leukopenia (1), mouth lesions (7), nausea (2)	Unk
Smith, 144 (1999)	PV	Pred stopped in 6 months: 6/9	Unk	Unk [7-55 d]	Pred (9)	Liver enzyme elevation (2), nausea (1)	Unk
Tran, 40 (2013)	PV	Improvement in clinical symptoms: 21/23	Unk	Unk [0-26]	FA 1 mg/d, TCA injections, TCS	Haematocrit decrease (1), abnormalities on liver ultrasound (1)	Unk
Lower, 145 (1995)	Sar	Responders: 16/23 Non-responders: 1/23 Unk: 5	Unk	Unk	Antimalarial agents, nonsteroidals, pred (3)	Cough (1), hepatotoxicity (6), mouth sores, nausea	Leukopenia requiring hospitalization (1)
Veien, 146 (1997)	Sar	Clearing skin lesions: 12/16	16 - 104	Unk	Unk	Elevated liver enzymes (2), fatigue (2), nausea (6), stomatitis (1)	None
Schanz, 72 (2013)	Scl	Responders: 12/22 Stable disease: 10/22	Unk	Unk	FA 5 mg (22), Prednisolone 1mg/kg after induction phase tapered (22)	Unk	Unk
Breuckmann, 73 (2005)	SD	No response: 7/7	NA	NA	FA	Unk	Unk
Herrick, 147 (2017)	SS	mRSS reduction: MTX: -4.0 MMF: -3.8 CP: -3.5	Unk	Unk	Unk	Unk	Unk
Pope, 150 (2001)	SS	No significant differences in UCLA skin score, modified Rodnan score and MD global assessment	Unk	Unk	Additional MTX 1.25-3.5 mg/week (11)	Or ulcers (1)	MTX (3), placebo (7)
Sumanth, 148 (2007)	SS	Improvement of skin score: Excellent: 1/33 Moderate: 4/33	Unk	Unk	Unk	Nausea/vomiting (3), fever (2), edema (2), increased bilirubin (2), alopecia (92), anorexia (1), dyspnea (1), headache (1), elevated liver enzymes (1), upper respiratory tract infection (1), angiedema (1), fever (1)	Unk

		Mild: 12/33 None: 3/33 Deterioration: 5/33 Lost-to-follow-up: 8/33					
Van den Hoogen, 149 (1996)	SS	Significant improvement of TSS and VAS: MTX: 8/17 Placebo: 1/12	Unk	Unk	Pred <10 mg/d	Elevated liver enzymes (6), headache (1), pancytopenia (1)	Renal crisis (1), sudden death (1)
Leducq, 151 (2019)	Ur	Complete urticaria remission (ITT): MTX: 3/38 Placebo: 0/32	Unk	Unk	H1-AH (39)	Anemia (4), asthenia (4), cholestasis (5), elevated liver enzymes (17), gastrointestinal discomfort (17), headache (3), insomnia (1), leukopenia (4), lymphopenia (3), nasopharyngitis (5), neutropenia (1), respiratory tract infection (4), urinary tract infection (1)	Cerebrovascular stroke (1), unstable angina (1)
Perez, 66 (2010)	Ur	Responders: 12/16 Steroid sparing: 2/16	Unk	Unk	FA 5 mg (16), Prednisolone 10-60 mg/d (16)	Dyspnea (1), fatigue, hair thinning	Unk
Sagi, 58 (2011)	Ur	Complete clinical remission: 7/8 No response: 1/8	3-5	Unk [4-15]	AH (5), FA 5 mg (8), Pred (8)	Gastrointestinal discomfort (2), liver enzymes elevation (1), subjective fatigue (1)	None
Sharma, 152 (2014)	Ur	>2/3 of baseline urticaria scores achieved: MTX: 3.5/10 Placebo: 3.67/7	Unk	Unk	Levocetirizine 5 mg/d (Unk)	Liver enzyme elevation (2), uncontrollable nausea (1), vomiting (1)	None
AlGhamdi, 37 (2013)	Vi	Clinical improvement: no change (6/6)	Unk	Unk	FA, 5 mg/d	None	None
Singh, 47 (2015)	Vi	New vitiliginous lesions: MTX: 6/25 CST 7/25	Unk	Unk	FA 5 mg/week	Nausea (4), severe nausea (1)	None

~ - at the end of treatment duration, see reference for definition of outcomes

AA: Alopecia areata, AB: Antibiotics, AD: Atopic dermatitis, AH: Antihistamines, All CE: Allergic Contact Eczema, AO: Adult onset, AZA: Azathioprine, BP: Bullous pemphigoid, CP: Cyclophosphamide, CQ: Chloroquine, CSA: Ciclosporin, CSS: Clinical severity score, CST: Corticosteroids, D: Day, DM: Dermatomyositis, E: Eczema, EF: Eosinophilic fasciitis, Em: Emollients, ENL: Eythema Nodosum Leprosum, ET: Etretinate, FA: Folic acid, G: Gram, GA: Granuloma Annulare, GD: Gastroduodenal, GCS: Glucocorticosteroids, GI: Gastrointestinal, HCQ: Hydroxychloroquine, IL: Intralesional, ITT: Intention to treat, IV: Intravenous, IVIG: Intravenous immunoglobulin, LE: Lupus erythematosus, LP: Lichen planus, LPP: Lichen planopilaris, LS: Lichen Sclerosus (extra genital), LyP: Lymphomatoid papulosis, M: Morphea, mg: milligram, MMF: Mycophenolate Mofetil, MNX: Minoxidil, Mo: Month, MP: Methylprednisolone, MTX: Methotrexate, Or: Oral, OCS: Oral Corticosteroids, Pa: Panniculitis, PD: Papular Dermatitis, PGA: Patient Global Assessment, PF: Pemphigus Foliaceus, epidemical, fogo selvage, PPP: Palmoplantar pompholyx, PN: Prurigo Nodularis, Pred: Prednisone, Pr: Prurigo, PrD: Parthenium Dermatitis, PRP: Pityriasis rubra pilaris, Pt: Patient, Pts: Patients, PV: Pemphigus vulgaris, RCT: Randomized Controlled Trial, SAB: Systemic antibiotics, SAH: Systemic Antihistamines, Sar: Sarcoidosis, SCORAD: SCORing of Atopic Dermatitis, SCS: Systemic corticosteroids, Scl: Scleroderma, SD: Sclerodema diabeticorum, SS: Systemic sclerosis, TA: Topical agents, TAC: Tacrolimus, TCA: Triamcinolone, TCI: Topical calcineurin inhibitor, TCS: Topical corticosteroids, Unk: Unknown, Ur: Urticaria, UVB: Ultraviolet-B, VAS: Visual analogue scale, Vi: Vitiligo, Vit: Vitamin, Wk: Week