QUICK REFERENCE FOR HEALTHCARE PROVIDERS

MANAGEMENT OF PSORIASIS VULGARIS

Ministry of Health Malaysia  Dermatological Society of Malaysia  Academy of Medicine Malaysia
KEY MESSAGES

• Psoriasis is a genetically determined, systemic immune-mediated chronic inflammatory disease that affects primarily the skin and joints.

• Psoriasis Vulgaris is characterised by well-demarcated erythematous plaques with silvery scales on elbows, knees, lumbosacral region, and scalp, and nail changes.

• Erythrodermic psoriasis affects more than 80% body surface area.

• Generalised pustular psoriasis is widespread erythema studded with superficial pustules which may coalesce to form lakes of pus.

• Psoriasis can be as mentally and physically disabling as cancer, heart disease, diabetes, hypertension, arthritis and depression.

• Psoriatic arthritis affects about 16% of Malaysians with psoriasis. Early recognition and treatment prevent deformities. Assessment should be performed at least annually by looking for relevant signs and symptoms:-
  a. Joint swelling
  b. Dactylitis
  c. Significant early morning stiffness >1/2 hour

• Psoriasis patients are more prone to cardiovascular diseases, stroke, lymphoma and non-melanoma skin cancers, and increased mortality.

• Psoriasis patients should be screened for metabolic syndrome and risk factors of atherosclerosis-related diseases.

• Assess physical severity of psoriasis with Psoriasis Area and Severity Index (PASI) or Body Surface Area (BSA). Assess the impact of psoriasis on the quality of life (QoL) of patients with Dermatology Life Quality Index (DLQI)

• Choice of treatment for pregnant and lactating women should benefit the mother and pose minimal risk to the foetus/baby.

This Quick Reference provides key messages and a summary of the main recommendations in the Clinical Practice Guidelines (CPG) Management of Psoriasis Vulgaris.

Details of the evidence supporting these recommendations can be found in the above CPG, available on the following websites:

Ministry of Health Malaysia : www.moh.gov.my
Academy of Medicine Malaysia : www.acadmed.org.my
Malaysian Dermatology Society : www.dermatology.org.my
**PRINCIPLES OF TREATMENT**

- Management should start with patient education.
- Treatment of psoriasis should be a combined decision between patients & their healthcare providers.
- Treatment goal and minimal target set should be based on disease severity and patient’s preferences.
- Treatment goal achieved should be monitored regularly to detect loss of response which may necessitate modification of therapy.

**ASSESSMENT OF SEVERITY**

**Grading of Psoriasis Severity**

<table>
<thead>
<tr>
<th>Grade of severity</th>
<th>Measurement tools</th>
<th>Interpretation</th>
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</thead>
<tbody>
<tr>
<td>Mild</td>
<td>BSA ≤10%</td>
<td>Disease with a minimal impact on the patient’s QoL and patient can achieve acceptable symptom control by standard topical therapy</td>
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<td>PGA mild</td>
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<td></td>
<td>PASI ≤10</td>
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<td></td>
<td>DLQI ≤10</td>
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<tr>
<td>Moderate</td>
<td>BSA &gt;10% to 30%</td>
<td>Disease that cannot be, or would not be expected to be controlled to an acceptable degree by standard topical therapy, and/or disease that moderately affects the patient’s QoL</td>
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<td></td>
<td>PGA moderate</td>
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<td></td>
<td>PASI &gt;10 to 20</td>
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</tr>
<tr>
<td></td>
<td>DLQI &gt;10 to 20</td>
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<tr>
<td>Severe</td>
<td>BSA &gt;30%</td>
<td>Disease that cannot be, or would not be expected to be controlled by topical therapy and that adversely affect patient’s QoL (this include erythrodermic psoriasis, pustular psoriasis and psoriatic arthritis)</td>
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<tr>
<td></td>
<td>PGA severe or very severe</td>
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<tr>
<td></td>
<td>PASI &gt;20</td>
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<tr>
<td></td>
<td>DLQI &gt;20</td>
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</tbody>
</table>

**TREATMENT GOALS OF VARIOUS MODALITIES**

<table>
<thead>
<tr>
<th>TREATMENT</th>
<th>MINIMAL TARGETS</th>
<th>TIME FOR EVALUATION (WEEKS)</th>
<th>SUBSEQUENT EVALUATION (MONTHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topical therapy</td>
<td>↓ BSA ≥50 or PASI ≥50 or DLQI ≤5</td>
<td>6</td>
<td>6 – 12</td>
</tr>
<tr>
<td>Phototherapy Methotrexate Cyclosporine Acitretin</td>
<td>↓ BSA ≥75 or PASI ≥75 or DLQI ≤5</td>
<td>6 16 16</td>
<td>12 6</td>
</tr>
<tr>
<td>Infliximab Adalimumab Ustekinumab Etanercept</td>
<td>PASI ≥75 OR PASI 50 to &lt;75 plus DLQI ≤5</td>
<td>10 16 16 24</td>
<td>6</td>
</tr>
</tbody>
</table>
TREATMENT MODALITIES

• Patients with mild or moderate psoriasis with minimal impairment in QoL (DLQI ≤5) should be treated with topical agents.
• Emollient should be used regularly.
• Tar-based preparations may be used as a first-line topical therapy.
• Short-term use of potent and very potent topical corticosteroid may be used to clear limited plaques.
• Mild potency corticosteroid may be used for face, genitalia and body folds.
• Fixed dose combination of vitamin D analogue and corticosteroid may be used for short-term treatment.
• Topical vitamin D analogue may be used but dose should not exceed 100g / week.
• Phototherapy should be offered to patients who have failed topical therapy before starting them on systemic agents.
• Life time exposure to psoralen plus ultraviolet A (PUVA) and ultraviolet B (UVB) should not exceed 200 and 350 sessions respectively.
• Systemic / biologic therapy for moderate to severe psoriasis should be initiated by a dermatologist.
• Pre-treatment assessment and regular monitoring for toxicity should be done during systemic / biologic therapy.
• Methotrexate or acitretin should be used as first-line systemic therapy.
• Cyclosporine may be used as second-line systemic therapy.
• Cyclosporine should NOT be used for more than 2 years and avoided in patients with previous PUVA exposure.
• Biologics should be offered to patients who fail, have intolerance or contraindication to conventional systemic treatment and phototherapy.

CRITERIA OF REFERRAL

1. Dermatology Referral

Indications for referral
• Diagnostic uncertainty
• Erythrodermic or pustular psoriasis should be referred urgently for specialist assessment and treatment
• Patients who have failed adequate trial of topical therapy for 6 - 12 weeks
• Severe psoriasis that requires phototherapy or systemic therapy

2. Rheumatology Referral

Indications for referral
• Diagnostic evaluation of patients with suspected Psoriatic Arthritis (PsA)
• Formulate management plan for PsA
**ALGORITHM 1: MANAGEMENT OF PSORIASIS VULGARIS IN PRIMARY CARE**

**PSORIASIS PATIENT PRESENTING TO PRIMARY CARE**

- Articular symptoms / signs suggestive of PsA
  - Joint swelling
  - Dactylitis
  - Significant early morning stiffness >1/2 hour

1. **Assess**
   - Severity
   - Arthritis (PsA)
   - Co-morbidities
2. **Educate patient**

- Presence of co-morbidities such as obesity, hypertension, diabetes, depression etc.

**SEVERITY**

**Mild** (BSA ≤10% or PASI ≤10)

- Topical Therapy
- **DQI ≤10**
- Re-assess in 6 weeks
- **RESPONDER**
  - YES: DQI ≤5
  - NO: DQI >5

**Moderate** (BSA >10% to 30% or PASI >10 to 20)

- Optimise topical therapy
- **DQI ≤5**
- **RESPONDER**
  - YES: DQI ≤5
  - NO: DQI >5

**Severe** (BSA >30% or PASI >20)

- Erythrodermic or generalised pustular psoriasis: urgent referral is indicated
- **REFER TO DERMATOLOGIST**

**MANAGE / REFER TO RELEVANT SPECIALITY**

**BSA** - Body Surface Area
**PASI** - Psoriasis Area and Severity Index
**DQI** - Dermatology Life Quality Index
**Responder** - BSA ≥50% reduction or PASI ≥50 achieved

**Regular follow-up as indicated**

- Annual assessment:
  - Document severity
  - Assess co-morbidities and articular symptoms
  - Optimise topical treatment
ALGORITHM 2: TREATMENT OF PSORIASIS VULGARIS

PSORIASIS VULGARIS

Mild (BSA \( \leq 10\% \) or PASI \( \leq 10 \))
- Topical Therapy
  - Tar (First-line therapy)
  - Dithranol (Large plaque)
  - Corticosteroids (Short-term therapy)
  - Vitamin D analogues (<100g/week)
  - Calcineurin inhibitors (Face & Flexures only)

Moderate (BSA >10% to 30% or PASI >10 to 20)
- Assess DLQI
  - DLQI \( \leq 10 \)
  - Topical Therapy
    - Tar
    - Dithranol (Large plaque)
    - Corticosteroids (Short-term therapy)
    - Vitamin D analogues (<100g/week)
    - Calcineurin inhibitors (Face & Flexures only)
  - DLQI >10
  - Phototherapy

Severe (BSA >30% or PASI >20)
- Assess DLQI
  - DLQI \( \leq 10 \)
  - Systemic Therapy
    - Methotrexate (First-line)
    - Acitretin (First-line)
    - Cyclosporine (Short-term therapy)
  - DLQI >10
  - Biologics
    - Ustekinumab
    - Adalimumab
    - Etanercept
    - Infliximab

Failed / contraindicated / not available

DLQI: Dermatology Life Quality Index
BSA: Body Surface Area
PASI: Psoriasis Area and Severity Index
<table>
<thead>
<tr>
<th>DRUG</th>
<th>CATEGORY</th>
<th>RECOMMENDED DOSAGE</th>
<th>SIDE EFFECTS</th>
<th>CONTRAINDICATIONS</th>
<th>SPECIAL PRECAUTION</th>
<th>DRUG INTERACTION</th>
<th>PREGNANCY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOPICAL CORTICOSTEROIDS</strong></td>
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<tr>
<td>Hydrocortisone 1% Cream / Ointment</td>
<td>Mild</td>
<td>1-2 times daily</td>
<td>Worsening of untreated infection, contact dermatitis, pruritus, folliculitis, rosacea, skin atrophy, pruritus, tingling/stinging, rosacea, folliculitis, photosensitivity</td>
<td>Untreated bacterial, fungal, or viral skin lesions, in rosacea, and in peri-oral dermatitis</td>
<td>Avoid prolonged use on the face</td>
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<tr>
<td>Betamethasone 17-Valerate 0.025% Cream / Ointment</td>
<td>Moderate</td>
<td>Once daily</td>
<td>Dermatitis, folliculitis, irritation, photosensitivity</td>
<td>Avoid use on face and body folds</td>
<td>Limit continuous use to &lt;4 weeks</td>
<td>Avoid use on face and body folds</td>
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<tr>
<td>Clobetasone Butyrate 0.05% Cream / Ointment</td>
<td>Potent</td>
<td>1-2 times daily</td>
<td>Worsening of untreated infection, contact dermatitis, pruritus, folliculitis, rosacea, skin atrophy, pruritus, tingling/stinging, rosacea, folliculitis, photosensitivity</td>
<td>Untreated bacterial, fungal, or viral skin lesions, in rosacea, and in peri-oral dermatitis</td>
<td>Avoid prolonged use on the face</td>
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<tr>
<td>Betamethasone 17-Valerate 0.1% Cream / Ointment</td>
<td>Very Potent</td>
<td>Once daily</td>
<td>Dermatitis, folliculitis, irritation, photosensitivity</td>
<td>Avoid prolonged use on the face</td>
<td>Limit continuous use to &lt;2 weeks</td>
<td>Avoid use on face and body folds</td>
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<td>Limit to 60g/week</td>
<td>Limit to 60g/week</td>
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<tr>
<td>Clobetasol Propionate 0.05% Cream / Ointment</td>
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<td>1-2 times daily</td>
<td>Worsening of untreated infection, contact dermatitis, pruritus, folliculitis, rosacea, skin atrophy, pruritus, tingling/stinging, rosacea, folliculitis, photosensitivity</td>
<td>Untreated bacterial, fungal, or viral skin lesions, in rosacea, and in peri-oral dermatitis</td>
<td>Avoid use on face and body folds</td>
<td>Limit continuous use to &lt;2 weeks</td>
<td>Avoid use in 1st trimester of pregnancy</td>
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<tr>
<td>Mometasone Furoate 0.1% Cream / Ointment</td>
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<td>Once daily</td>
<td>Dermatitis, folliculitis, irritation, photosensitivity</td>
<td>Avoid prolonged use on the face</td>
<td>Limit continuous use to &lt;4 weeks</td>
<td>Avoid contact with eyes, genital / rectal areas</td>
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<td>Limit to 60g/week</td>
<td>Limit to 60g/week</td>
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<td>DITHRANOL PREPARATIONS</td>
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<td>0.1-0.5% suitable for overnight treatment for skin 1.2% short contact therapy 30 mins -1 hour</td>
<td>Avoid use on face and body folds</td>
<td>Local burning sensation and irritation, stasis skin, hair and toes</td>
<td>Acutely inflamed and pustular psoriasis</td>
<td>Avoid broken or inflamed skin</td>
<td>Avoid excessive exposure to sunlight and sunlamps</td>
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<td>SALICYLIC ACID 2-10% CREAM / OINTMENT</td>
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<td><strong>TOPICAL VITAMIN D ANALOGUE</strong></td>
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<td>Calcipotriol 50 mcg/g Cream / Ointment</td>
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<td>Twice daily</td>
<td>Itching, erythema, burning, photosensitivity</td>
<td>Avoid use on face and body folds</td>
<td>Avoid excessive exposure to sunlight and sunlamps</td>
<td>Pregnant</td>
<td>Breast feeding</td>
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<tr>
<td>Calcipotriol 50 mcg/ml Scalp Solution</td>
<td></td>
<td>Twice daily</td>
<td>Itching, erythema, burning, photosensitivity</td>
<td>Avoid use on face and body folds</td>
<td>Avoid excessive exposure to sunlight and sunlamps</td>
<td>Pregnant</td>
<td>Breast feeding</td>
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<tr>
<td>Calcipotriol Hydrate 50 mcg/g &amp; Betamethasone Dipropionate 0.5mg/g Ointment / Gel</td>
<td></td>
<td>Once daily</td>
<td>Itching, erythema, burning, photosensitivity</td>
<td>Avoid use on face and body folds</td>
<td>Avoid excessive exposure to sunlight and sunlamps</td>
<td>Pregnant</td>
<td>Breast feeding</td>
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<tr>
<td><strong>TAR-BASED PREPARATION</strong></td>
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<tr>
<td>0.1-2% suitable for overnight treatment for skin</td>
<td>Avoid use on face and body folds</td>
<td>Local burning sensation and irritation, stasis skin, hair and toes</td>
<td>Acutely inflamed and pustular psoriasis</td>
<td>Avoid broken or inflamed skin</td>
<td>Avoid excessive drying, irritation, salicylism with excessive use</td>
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<tr>
<td>DRUG</td>
<td>RECOMMENDED DOSAGE</td>
<td>SIDE EFFECTS</td>
<td>CONTRAINDICATIONS</td>
<td>SPECIAL PRECAUTION</td>
<td>DRUG INTERACTION</td>
<td>PREGNANCY CATEGORY</td>
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<td><strong>SYSTEMIC AGENTS</strong></td>
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<td>Acitretin</td>
<td>0.5 to 1 mg/kg body wt/day Max: 75 mg/day</td>
<td>Chilblain, xerosis, alopecia, skin peeling, stiction, paronychia, parotidal pyogenic granuloma, pruritus, hyperlipidemia, transaminitis, hyperaesthesia</td>
<td>Pregnancy or intention to become pregnant, breast feeding, hypersensitivity, severe hepatic or renal dysfunction, comitant use with methotrexate or tetracyclines</td>
<td>Avoid pregnancy for at least 1 month before, during, and for at least 3 years after treatment</td>
<td>Alcohol, methotrexate, tetracyclines, tigecycline, vitamin A, contraceptives</td>
<td>X</td>
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<tr>
<td>Cyclosporine</td>
<td>2.5 mg-5 mg/kg body wt/day divided twice daily</td>
<td>Hypertension, hyperuricaemia, hyperlipidaemia, hypomagnesaemia, hyperlipidaemia, osteitis, headache, hipertermia, nausea, diarrhea, tremor, renal dysfunction, infections</td>
<td>Hypersensitivity, abnormal renal function, uncontrolled hypertension, malignancies, comitant treatment with PUVA or UVB therapy, methotrexate, other immunosuppressive agents, or radiation therapy</td>
<td>Limit use to 2 years, monitor renal function closely, liver function, blood pressure, hyperuricaemia, serum magnesium, pregnancy and breast feeding, acute porphyria, avoid excessive exposure to UV light including sunlight</td>
<td>ACE inhibitors, aliskiren, lapizarine, BCG, bosantan, calcium channel blockers, thabradine, statins, methotrexate, milpersistine, porphyria, potassium-sparing diuretics, live vaccines, vincristine</td>
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<tr>
<td>Methotrexate</td>
<td>Oral, IM or SC: 10-20 mg/dose once weekly</td>
<td>Nausea &amp; vomiting, malaise, headache, hepatotoxicity, mucositis, myelosuppression, lung fibrosis, immunosuppression</td>
<td>Hypersensitivity, pregnancy, pre-existing liver disease or blood dyscrasias</td>
<td>Chronic alcoholism, obesity, diabetes, Hep B &amp; C, renal Insufficiency</td>
<td>Acitretin, BCG, clozapine, cyclosporine, loop diuretics, NSAIDs sulphonamides, trimethoprim</td>
<td>X</td>
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<td><strong>BIOLOGICS</strong></td>
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<td>Adalimumab</td>
<td>Loading dose: 80 mg Maintenance dose: 40 mg every other week beginning 1 week after initial dose</td>
<td>Opportunistic infections, reactivation of tuberculosis, malignancy, congestive heart failure, demyelinating disease, infection/infusion reactions, haematological disturbances, hepatotoxicity, development of auto antibodies, and lupus like reaction</td>
<td>Absolute Active infection including tuberculosis, malignancy, congestive cardiac failure class 3 or 4, demyelinating diseases</td>
<td>Biologics should be discontinued: • In pregnancy • prior to major surgery (6 weeks for infliximab; 4 weeks entanercept; 10 weeks adalimumab and 12 weeks ustekinumab)</td>
<td>Biologics should be discontinued: • In pregnancy • prior to major surgery (6 weeks for infliximab; 4 weeks entanercept; 10 weeks adalimumab and 12 weeks ustekinumab)</td>
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<tr>
<td>Etanercept</td>
<td>25-50 mg twice weekly</td>
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<td>Relative History of tuberculosis/ malignancy, HIV infection, Hepatitis B/C infection, congestive cardiac failure class 1 or 2, pregnancy or breast feeding, prior PUVA (&gt;200 sessions) and UVB (&gt;350 sessions) exposure</td>
<td>Patient should not receive live or live-attenuated vaccine &lt;2 weeks before, during and 6 months after biologics discontinuation</td>
<td>Patient should not receive live or live-attenuated vaccine &lt;2 weeks before, during and 6 months after biologics discontinuation</td>
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<tr>
<td>Infliximab</td>
<td>5 mg/kg at 0, 2 and 6 weeks followed by 5 mg/kg every 8 weeks thereafter</td>
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<tr>
<td>Ustekinumab</td>
<td>45 mg for patients weighing ≤100 kg and 90 mg for patients weighing &gt;100 kg given at weeks 0 and 4 then every 12 weeks</td>
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