Chapter 7

ANNEXURE
Annexure I

Volunteer Information

Title of project: Pharmacogenetics of Methotrexate (MTX) response (efficacy, toxicity)
In Indian Rheumatoid Arthritis patients

Centre for Rheumatic Diseases, Pune 411001
Interdisciplinary School of Health sciences, University of Pune, Pune 411007

This study is being carried out to find out the blood levels of a known anti-rheumatic oral
drug Methotrexate and the gene polymorphism in enzymes metabolizing this drug. You are
requested to participate in the therapeutic drug monitoring study (three blood samples) in
which after a single dose of Methotrexate 3 ml/time point blood samples will be collected by
an indwelling catheter over 8 hours. You will be under observation during this period.
For your breakfast and lunch during the study you will be offered compensation of Rs ___/- .
However you are free to withdraw from the study at any stage. Since there are no reports in
the Indian RA patients on effect of genetic polymorphism on MTX metabolism and response
this study will give us information on this aspect.

Continued…
Volunteer Consent:

I, ____________________________, aged _______ years, of my own free will give my consent to participate in the above-mentioned study. I understand that the drugs used in this study are safe for use and I am consuming this medicine. I am willing to provide a total of 3 blood samples of 3 ml each, at an interval of 0 hours, 2 hours and 8 hours. I will be under observation and will not take any other drugs during the study period except in emergency.

I have been told that I can withdraw from the study any time without having to give any reason and that this will not affect my treatment in future at the clinic. I understand that the information arising from this study will be kept confidential and will be used only for the research purposes.

Name of the volunteer ____________________________
Age_________________________ Education _______________ Date _______________
Address ____________________________________________________________ Telephone __________________

Name of the witness __________________________
Date _______________
Address ____________________________________________________________ Telephone __________________

Name of the Investigator __________________________
Date _______________
Address ____________________________________________________________ Telephone __________________
Annexure II

ACR Clinical Classification Criteria for Rheumatoid Arthritis

Using history, physical examination, laboratory and radiographic findings:
4 of the following must be present with 1 through 4 present a minimum of 6 weeks.

- Morning stiffness ≥ 1 hr
- Arthritis of 3 or more of the following joints: right or left PIP, MCP, wrist, elbow, knee, ankle and MTP joints.
- Arthritis of wrist, MCP or PIP joint
- Symmetric involvement of joints
- Rheumatoid nodules over bony prominences or extensor surfaces or in juxtaarticular regions
- Positive serum rheumatoid factor
- Radiographic changes including erosions and bony decalcification localized in or adjacent to the involved joints.
### Classification of Global Functional status in Rheumatoid Arthritis by ACR

<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class I</td>
<td>Completely able to perform usual activities of daily living (self-care, vocational and avocational)*</td>
</tr>
<tr>
<td>Class II</td>
<td>Able to perform self-care but limited avocational</td>
</tr>
<tr>
<td>Class III</td>
<td>Able to perform self-care but limited vocational and avocational</td>
</tr>
<tr>
<td>Class IV</td>
<td>Limited in ability to perform usual self-care vocational and avocational activities</td>
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</tbody>
</table>

* Usual self-care activities include dressing, feeding, bathing, grooming and toileting. Avocational (recreational and or leisure) and vocational (work, school, home working activities are patient-desired and age and sex specific)
INFORMATION FORM

Name: ___________________________________________ Subject No. AG ______

Sex: M/F Age: __________ DOB ___________ Occupation: ___________ Native place ___________

Religion ___________ Caste ___________ Height ___________ Feet / Cm Weight ___________ Kg.

Address: ___________________________________________

Phone no. ___________ E-mail Address: __________________________

Past History:

• Diseases:

• Allergies:

Personal History:

• Habits:

• Diet habits:

Family History:

• Maternal:

• Paternal:

Drug history:

Previous ADRs or Hypersensitivity: ___________________________________________

Frequent medication: ___________________________________________

Other: ___________________________________________
Prakruti evaluation: (Physician's perspective: Based on History and clinical evaluation)

Prakruti: (Provisional clinical diagnosis):

Rationale for above diagnosis:

(Please use backside of this sheet if required)
PRAKRUTI ANALYSIS

Patient name: _____________________________ Patient No. AG1 Date ______

DISEASE TENDENCY: □ Nervous system complaints □ mental disorders □ Pain □ Burning
□ Inflammatory diseases □ Febrile diseases □ Edema □ Respiratory diseases □ Mucus

PHYSIQUE: □ Lean □ Normal □ Well built □ Fat

Weight loss: □ Negligible □ Moderate □ Quick □ Recovery after disease: □ Slow □ Moderate □ Quick

HAIR: Colour: □ Black □ Golden □ Tawny □ Grey □ Overall: □ Curly □ Bald □ Moderate □ Thick
Individual: □ Soft □ Long □ Oily □ Thick □ Dry □ Pointed; Easily fall? □ Yes □ No

FOREHEAD: Size: □ Small □ Moderate □ Large, NECK: Bulky: □ Less □ Adequate □ More

EYE: Eyes: □ Sinall □ Moderate □ Large, □ Open during sleep □ Flush/ red in anger
Eyebrows: □ Less, easily removable, variable sizes □ Moderate & tawny □ Thick, oily, broad same size,
Krishnamandal: □ Black □ Tawny □ Golden Shvetamandha: □ Muddy □ Reddish □ White and watery,
Eyelashes: □ Dry, less in number, pointed □ Tawny or gray □ Thick, long and black

NOSE: Size: □ Small □ Medium □ Large, Overall: □ Flat □ Delicate □ Straight, Nostrils: □ Sym □ Asym

CHEEKS: □ Dry □ Soft □ Acne □ Pink/reddish □ Puffy □ Oily □ Flushed in anger? □ Get easily pinched?

LIPS: □ Dry □ Soft □ Pink/reddish □ Blackish □ Oily □ Cracked in winter?

CHIN: □ Sym □ Asym □ Blunt/bifid □ Sharp, Size: □ Small □ Medium □ Large

EAR: □ Small □ Medium □ Large & thick □ Delicate, thin & soft

TEETH: Size: □ Small □ Medium □ Large, Overall: □ Visible while speaking □ Complaints about teeth?

Gums: □ Dusky □ Reddish □ Pink

Individual teeth: □ Dusky □ Crooked margins □ Sharp edges □ Yellowish □ White

HAND: Muscles: □ Not well developed □ Soft & delicate □ Well developed

Palm: Length: □ Short □ Medium □ Long, Fingers: □ Thin □ Normal □ Thick & small

Touch: □ Dry □ Comparatively hot □ Oily □ Nails: □ Asym & pointed □ With lines □ Easily cut □ Soft and rounded □ Oily & thick, Colour: □ Muddy/blackish □ Reddish □ Pink; Size: □ Small □ Medium □ Large

THIGH: Diameter: □ Small □ Medium □ Large, Appearance: □ Under developed □ Soft & delicate □ Hard & well developed
Calf: Diameter: □ Small □ Medium □ Larger. Appearance: □ Under developed □ Soft & delicate □ Hard & well developed

Feet: □ Bones easily palpable, capillaries easily visible, toes long & crack on sole □ Delicate, soft, reddish & comparatively hot □ Bulky with well-developed fingers.

Skin: Color: □ Dark □ Fair with reddish / yellowish □ Whitish & bright. Moles: □ Less □ Moderate □ High. □ Absorb more oil? □ Cracks in winter? □ Does skin become red due to slight trauma?

Hair on skin: □ Dry, less, easily removable □ Tawny/golden & soft □ Thick, more, soft easily removable

Bones: Easily visible □ Visible □ Not clearly visible


Continuity and clarity: □ Less □ Moderate □ High □ Can you sit calm and quite in one place?

ABDOMEN: □ Lean and flat □ Soft and delicate □ Big & hard

Hunger, Thirst & Digestion:

Food: □ Some times easily digested & some times not □ Easily digested □ Always hard to digest

Thirst: □ Some times more & some times less □ Often thirsty & quantity required at a time is high □ Seldom thirsty & require less water to satisfy □ Can you retain thirst?

Hunger: □ Changes according to the season □ High & constant □ Less & constant □ Can you retain hunger?

Bowel movements: Need of laxatives □ Less □ Moderate □ High

Color of faeces: □ Dry, hard, blackish stools □ Yellowish, semisolid, moderate hot □ Yellowish & solid

Constipation: □ Yes □ No. Gases: □ Yes □ No

Urine: Quantity & frequency of micturation □ Sometimes more & sometimes less □ Moderate □ High, Appearance: □ Yellowish & moderately hot □ Watery

Bodily strength: □ Less □ Moderate □ High. Walking speed: □ Less □ Moderate □ High

Tolerance for Hard work / exercise: □ Less □ Moderate □ High

Cold: □ Less □ Moderate □ High. Heat: □ Less □ Moderate □ High
SLEEP: Consciousness during sleep: □ Less □ Moderate □ High
Freshness after sleep: □ Less □ Moderate □ High; Frequency of dreams: □ Less □ Moderate □ High
GENERAL: Which taste do you like? □ Sweet □ Salty □ Sour □ Bitter □ Pungent □ Astringent
Tolerance of food: □ Hot & Oily □ Cold □ Hot, Dry & spicy
MEMORY: □ Dull □ Moderate □ Sharp
Understanding: □ Quick □ Sometimes quick & sometimes late □ Late
Reaction to any instance: □ Quick □ Not fixed □ Slow & thoughtful
SWEAT: □ Moderate □ Sometimes more & sometimes □ high, bad odor with stains
MENTAL NATURE: □ Calm & cool □ Compliant □ Persistent □ Courageous □ Easily satisfied
□ Fond of competition □ Hot tempered □ Unstable □ Hard to satisfy □ Like tidiness □ Liking definite
□ Liking NOT definite □ Possessive □ Religious □ Self esteemed □ Shabby.

Remark:

Clinical diagnosis:

<table>
<thead>
<tr>
<th>Calculations</th>
<th>Dosha</th>
<th>Vata</th>
<th>Pitta</th>
<th>Kapha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Percentage</td>
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</tbody>
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Result:
SKIN: Color: ☐ Dark ☐ Fair ☐ reddish ☐ whitish ☐ bright
☐ Excess Oily ☐ Excess moles ☐ Excess wrinkles ☐ Superficial veins ☐ Superficial tendons
☐ Oily ☐ Dry ☐ smooth ☐ soft ☐ Rough ☐ cracked ☐ absorbs more oil?
Hair on skin: ☐ small ☐ Coppery/golden ☐ Thick ☐ soft
SWEAT: ☐ Less ☐ moderate ☐ high ☐ odor with stains.

AGNI:
Kshudba: ☐ Vishama ☐ Tikshna ☐ Madhyama ☐ Manda
Pachaukala (required for jeerna ahara): ☐ Irregular ☐ less than 3 hrs ☐ 3-5 hrs ☐ more than 5 hrs
Abhavaharanshakti: ☐ Vishama ☐ Uttama ☐ Heena
Apathya sevan parinam:
☐ Not fixed ☐ No effect ☐ Agnimamdya /diseases ☐ Temporary agnimamdya / other
Effect after meals: ☐ Not fixed ☐ No effect ☐ Lethargy / sluggishness / other
Kshudhasahatva: ☐ Not fixed ☐ No ☐ Yes

KOSHTHA
Bowel movements: ☐ daily, clear ☐ Not fixed ☐ moderate
Frequency of bowel movements: ☐ Once daily ☐ 2-3 times daily ☐ > 3 times daily ☐ Others ______
Consistency: ☐ Dry ☐ Yellow ☐ soft ☐ oily ☐ small quantity ☐ Bulky
Tendency: ☐ Gasses ☐ constipation ☐ piles ☐ bleeding ☐ loose motions