1. Title: Dermatology Database

2. Source Information:
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(c) Date: January, 1998

3. Past Usage:
1. G. Demiroz, H. A. Govenir, and N. Ilter,
"Learning Differential Diagnosis of Eryhemato-Squamous Diseases using
Voting Feature Intervals", Aritificial Intelligence in Medicine,

The aim is to determine the type of Eryhemato-Squamous Disease.

4. Relevant Information:
This database contains 34 attributes, 33 of which are linear
valued and one of them is nominal.

The differential diagnosis of erythemato-squamous diseases is a real
problem in dermatology. They all share the clinical features of
erythema and scaling, with very little differences. The diseases in
this group are psoriasis, seboreic dermatitis, lichen planus,
pityriasis rosea, cronic dermatitis, and pityriasis rubra pilaris.
Usually a biopsy is necessary for the diagnosis but unfortunately
these diseases share many histopathological features as

well. Another difficulty for the differential diagnosis is that a disease may show the features of another disease at the beginning stage and may have the characteristic features at the following stages. Patients were first evaluated clinically with 12 features. Afterwards, skin samples were taken for the evaluation of 22 histopathological features. The values of the histopathological features are determined by an analysis of the samples under a microscope.

In the dataset constructed for this domain, the family history feature has the value 1 if any of these diseases has been observed in the family, and 0 otherwise. The age feature simply represents the age of the patient. Every other feature (clinical and histopathological) was given a degree in the range of 0 to 3. Here, 0 indicates that the feature was not present, 3 indicates the largest amount possible, and 1, 2 indicate the relative intermediate values.

The names and id numbers of the patients were recently removed from the database.

5. Number of Instances: 366

6. Number of Attributes: 34

7. Attribute Information:
   -- Complete attribute documentation:
   Clinical Attributes: (take values 0, 1, 2, 3, unless otherwise indicated)
   1: erythema
   2: scaling
   3: definite borders
   4: itching
   5: koebner phenomenon
   6: polygonal papules
   7: follicular papules
   8: oral mucosal involvement
   9: knee and elbow involvement
   10: scalp involvement
   11: family history, (0 or 1)
   34: Age (linear)

   Histopathological Attributes: (take values 0, 1, 2, 3)
   12: melanin incontinence
   13: eosinophils in the infiltrate
   14: PNL infiltrate
   15: fibrosis of the papillary dermis

16: exocytosis
17: acanthosis
18: hyperkeratosis
19: parakeratosis
20: clubbing of the rete ridges
21: elongation of the rete ridges
22: thinning of the suprapapillary epidermis
23: spongiform pustule
24: munro microabcess
25: focal hypergranulosis
26: disappearance of the granular layer
27: vacuolisation and damage of basal layer
28: spongiosis
29: saw-tooth appearance of retes
30: follicular horn plug
31: perifollicular parakeratosis
32: inflammatory monoluclear inflitrate
33: band-like infiltrate

8. Missing Attribute Values: 8 (in Age attribute). Distinguished with '?'.

9. Class Distribution:
Database: Dermatology

Class code:	Class:	Number of instances:
1	psoriasis	112
2	seboreic dermatitis	61
3	lichen planus	72
4	pityriasis rosea	49
5	cronic dermatitis	52
6	pityriasis rubra pilaris	20