

There are some 'logic' relationships between the following columns:

- Subjective fever [EUPATH_0000100]
- Febrile [EUPATH_0000097]
- Asexual Plasmodium parasites present, by microscopy [EUPATH_0000048]
- Submicroscopic Plasmodium present, by LAMP [EUPATH_0000487]
- Malaria diagnosis [EUPATH_0000090]
- Complicated malaria [EUPATH_0000040]
- Basis of complicated diagnosis [EUPATH_0000316]
- Malaria treatment [EUPATH_0000740]
- Malaria diagnosis and parasite status [EUPATH_0000338]

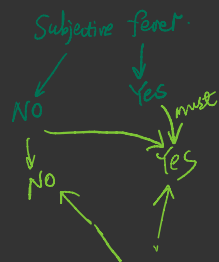
The relationships are drawn in the Analysis of highly_dependence_list in Pearson.pdf. Abbreviations are used in writing the name of columns and their categories. See the last page of the pdf for the full name of columns, and DataFrame0710.ipynb can show the categories of each column.

I call these relationships 'logic' because they are absolute - no outliers. For example, there is no data with 'No' in febrile or 'Negative' in Asexual microscopy but 'yes' in Malaria Diagnosis.

$A \rightarrow b_1, b_2, \dots, b_n$: The result of A is one of b_1, \dots, b_n .

$A \xrightarrow{\text{must}} B$: If A, then B must happen.

$A \iff B$: If A, then B must happen; If B happens, then A must happen as well.



(Febrile asexual microscopy)

'NAN'

B, not indicated
B, indicated not done

Negative

Positive

B. negative / LAMP negative
B. negative / LAMP positive
B. negative / LAMP not done
no result
Submicro. by lamp (recorded)

malaria diagnosis and parasite status.

Yes, Negative

No, Positive

No, Negative

Yes, Positive

must

must

must

no

Malaria Diagnosis

Yes

Complicated Malaria diagnosis recorded

No

Yes

Basis of complicated diagnosis (recorded)

any danger signs
only parasite density > 5000
severe malaria

no treatment

Art- for uncom. mala.

Quinine for uncom. 1st trim. of preg.

Quin for un. within 14 days.

Malaria Treatment

Quinine/Arte for complie. malaria

Subjective fever : Subjective fever [EUPATH_0000090]

Febrile : Febrile [EUPATH_0000097]

asexual microscopy

Asexual Plasmodium parasites present, by microscopy [EUPATH_0000048]

Submicro, by lamp recorded:

Submicroscopic Plasmodium present, by LAMP [EUPATH_0000487]

Malaria Diagnosis:

Malaria diagnosis [EUPATH_0000090]

Complicated Malaria diagnosis

Complicated malaria
[EUPATH_0000040]

Basis of complicated diagnosis:

Basis of complicated diagnosis
[EUPATH_0000316]

Malaria Treatment:

Malaria treatment [EUPATH_0000740]

malaria diagnosis and parasite status.

Malaria diagnosis and parasite status [EUPATH_0000338]