**Appendix. Criteria for diagnosis \***

General

Based on intervention and follow up, a causal relation of a specific disease or condition with recurrent abdominal pain (RAP) is supposed if the following criteria are fulfilled:

Therapeutic intervention results in elimination of the supposed cause (see below) and

disappearance of RAP within an appropriate space of time and

RAP does not reappear within a 6 months follow up period or

RAP reappears within 6 months, apparently due to the same cause and eliminated in the same way.

Helicobacter pylori gastritis (Hp)

Abdominal pain disappears after eradication of Hp.

Negative faecal test 4-6 weeks after triple therapy.

Protozoan infection

Abdominal pain disappears after eradication of the parasite [abdominal pain disappeared within several days after the end of the antibiotic course\*\*].

Negative triple faeces test ≥10 days after therapy.

Yersinia enterocolitica infection

Abdominal pain disappears after eradication of Yersinia [abdominal pain disappeared in about one month after the end of the antibiotic course\*\*].

Negative Yersinia IgA immunoblot at least 3 months after start of therapy (may take more time).

Celiac disease

Abdominal pain disappears with a gluten free diet.

Normalization of celiac antibodies (anti-endomysium, anti-tissue transglutaminase) and/or duodenal histology.

Carbohydrate intolerance

Abdominal pain disappears with elimination of lactose or fructose.

Pain returns with reintroduction of lactose or fructose; this should be repeatable.

Confirmation with double blind placebo controlled provocation.

Food allergy

Abdominal pain disappears within 5 weeks of elimination of offending food from the diet.

Pain returns with reintroduction of the food; this should be repeatable. Reintroduction should comprise a normal daily amount of the offending food; this should be continued during at least 3 days, in case of dubious symptoms to be continued till 7 days. Confirmation with double blind placebo controlled provocation. In case of multiple offending foods, double blind provocation is done with at least one allergen.

Constipation and occult constipation

Abdominal pain disappears with laxative treatment. Treatment may need to be continued throughout follow-up period. Pain may return upon reduction or discontinuation of treatment, but disappears again with laxative treatment.

Constipation: those children who fulfil the Rome criteria for functional constipation.

Occult constipation: those children who do not fulfil the Rome criteria for functional constipation, but did show relieve of symptoms with laxative treatment.

(Occult) constipation is a functional disorder. Patients with RAP related to (occult) constipation are considered to have functional abdominal pain.

Stress-related

History of consistent relation of abdominal pain with stressful situations or

Abdominal pain disappears completely after successful stress relieving intervention and does not recur during follow up.

Patients with stress-related abdominal pain are considered to have functional abdominal pain.

Spontaneous recovery

Abdominal pain disappears spontaneously, either before any intervention or in the course of time without assignable causal relation to an intervention.

Pain does not recur during follow up.

No certain diagnosis

Abdominal pain disappears in relation to an intervention, which excludes the conclusion “spontaneous recovery”, but according to protocol causality is insufficiently proven.

Unsolved

Abdominal pain does not disappear, or only temporarily; interventions are not successful.

Drop out

Tests not completed, interventions refused or lost to follow up prior to completion of the 6 months follow up period.

More than one diagnosis

More than one diagnosis is considered possible in case of persistent considerable relief of pain with an intervention, followed by persistent complete disappearance of pain with another intervention.

\*Adapted from Acta Paediatrica 2011;100:e208-e214. By courtesy of John Wiley and Sons © 2011 The Author(s)/Acta Paediatrica © 2011 Foundation Acta Paediatrica

\*\*Not known beforehand; consistent finding in this study