Supplemental Digital Content 1. Description of patient’s comorbidities undergoing gastrointestinal endoscopy procedures 15,17,18

|  |  |
| --- | --- |
| **Characteristics**  | **Description**  |
| **Child’s size**  |  | <2 years old based on growth chart for gender | ≥2 years old based on BMI chart for gender |
|  | Underweight  | Weight ≤5th percentile | BMI ≤5th percentile |
|  | Normal weight | 5th percentile < weight ≤95th percentile | 5th percentile < BMI ≤85th percentile |
|  | Overweight | Weight >95th percentile | 85th percentile < BMI ≤95th percentile |
|  | Obese | Not applicable | BMI >95th percentile |
|  | Morbid obese | Not applicable | BMI >95th percentile + 2 standard deviation |
| **Respiratory comorbidities** | Asthma, recurrent wheeze, nocturnal dry cough, bronchopulmonary dysplasia, cystic fibrosis, bronchiectasis, bronchial hyper-reactivity, obstructive breathing, snoring, obstructive sleep apnoea, congenital pulmonary cystic malformations, lobectomy, tracheo-broncho- laryngomalacia, maxillofacial deformity  |
| **Recent respiratory infection** | Upper or lower respiratory tract infection in less than 2 weeks prior to procedure |
| **Neurological comorbidities** | Cerebral palsy, neurodevelopmental delay, seizure disorders, quadriplegia |
| **Psychological disorders** | Attention deficit hyperactivity disorder, autism spectrum disorder, anorexia, feeding aversion, psychiatric problems, documented behavioural abnormalities e.g. anxiety out of proportion |
| **Prematurity** | Birth at <37 post- menstrual week |
| **Gastro-oesophageal reflux disease** | This was suspected clinically and confirmed by impedance- pH study and/or endoscopy findings e.g. sliding hernia |
| **Congenital cardiac abnormality** | Diagnosed by a paediatric cardiologist, corrected congenital cardiac abnormalities  |
| **Allergy** | This was diagnosed both clinically and upon skin prick testing and/or allergy test in blood |