This Unit is fully equipped for diagnosis and treatment of patients with respiratory diseases. It is composed of: A) a medical ward with 18 beds: 16 in double rooms and 2 in single rooms. Each bed is equipped with devices for controlled oxygen administration, i.v. therapy etc. Patients can be easily visited by their relatives either in the room or in a pleasant largely windowed saloon on the same floor. B) additional 4 (four) beds are equipped with respiratory and cardiac monitoring facilities with mechanical ventilators for management of moderate acute and acute on chronic respiratory failure. Mechanical ventilation through a tracheostomy and noninvasive mechanical ventilation are commonly administered in this “critical monitoring area”. C) Thoracic Endoscopy section for bronchoscopy, bronchial alveolar lavage (BAL), trans bronchial biopsies (TBB), and Trans-bronchial node aspiration (TBNA - EBUS). D) Laboratory of Respiratory Patho-Physiology, fully equipped for measurement of lung volumes (spirometer and body plethysmograph), diffusion capacity (DLCO), bronchial provocation test, cardio-pulmonary exercise test (CPET). E) Out-patients are visited either in a general pulmonology clinic or in dedicated clinics such as the asthma clinic, the diffuse lung diseases clinic. F) established interdisciplinary groups exist and routinely meet for severe asthma, pulmonary hypertension, idiomatic pulmonary fibrosis, and lung cancer. Our Pulmonary Units is deeply involved in research programs on severe asthma and lung senescence as well in both under- and post graduate university teaching programs in the medical, nursing, and physiotherapy paths.

The Unit provides care for patients with: 1. acute and acute on chronic respiratory failure from different causes and diseases, by means of: a) controlled administration of high oxygen concentration (up to 80%) and continuous positive airway pressure (CPAP); b) noninvasive mechanical ventilation both in pressure and volume driven modes; c) mechanical ventilatory assistance through a tracheostomy; d) monitoring of basic respiratory and cardiac function. 2. Upper and lower respiratory tract infections both community and hospital acquired pneumonia, also with complications such as pleural effusion, sepsis and other systemic complications. 3. Advanced neuromuscular and respiratory complications. 4. Lung Cancer in the advanced stage when needing additional treatments to regular chemotherapy. The diagnostic procedures are performed on an outpatient basis whenever possible. 5. Pulmonary embolism. 6. Rare respiratory disorders such as, for example, pulmonary hypertension, interstitial lung diseases, emphysema due to alpha-1 deficiency.

An integrated approach has been developed with the close Thoracic Surgery Unit, to speed up any surgical procedure for the patients admitted to either Unit. Thoracic drainages for massive pleural effusion and/or pneumothorax are managed in the Units.
**Therapeutic approach**

For the most common diseases, a diagnostic-therapeutic procedure document has been discussed and approved in the Unit involving both the Medical and Nursing Staff. The medical staff is composed by nine experienced specialists (one Director) in pulmonary diseases. The Nursing staff is composed almost completely by nurses with a three years university degree in Nursing Science. Standard procedures are available for: acute severe asthma, exacerbation of COPD, Pneumonia, Lung Cancer, Acute respiratory Failure, Palliative Care. A chart of treatment with antibiotics has been agreed with the Infectious Diseases Unit. Standards of diagnosis and care for Cardio-Pulmonary interaction have been shared with the Cardiology Unit.

The Imaging and clinical documentation for any patient is available paperless on the Hospital Intranet System. It can be examined by the staff after access with personal username and password.

After discharge from the Unit, patients are followed in the Unit clinics according to a “out-patient follow-up program” which is tailored to the specific therapeutic and management needs. Particular agreements have been established with long-term ward units for patients who need, after discharge from the Acute settings, medium-long time additional recovery in Low Intensity wards and/or in out-hospital rehabilitation Units.

**Annual cases**

More than 700 patients are treated annually in the ward and the monitoring unit. About 80% of patients are admitted from the Emergency Department. More than 3000 out-patients visits, 1200 endoscopy examination, more than 5000 lung function exams.

**Length of treatment and follow up**

The average length of Hospital stay in our Unit is 10 days with a 5% outliers. A short (30 days) follow-up is planned for most of the patients after discharge. Special follow-up programs exist for some diseases such as severe asthma, idiopathic pulmonary fibrosis, pulmonary hypertension.