



**CONCORSO PUBBLICO, PER TITOLI ED ESAMI, A N. 1 POSTO DI CATEGORIA D - AREA TECNICA, TECNICO-SCIENTIFICA ED ELABORAZIONE DATI, CON RAPPORTO DI LAVORO SUBORDINATO A TEMPO INDETERMINATO PRESSO L'UNIVERSITÀ DEGLI STUDI DI MILANO - DIPARTIMENTO DI SCIENZE DELLA SALUTE - CODICE 22286**

La Commissione giudicatrice del concorso, nominata con Determina Direttoriale n. 8115 del 19.5.2023, composta da:

Prof. Andrea Gori	Presidente
Dott. Andrea Gramegna	Componente
Dott.ssa Laura Madaschi	Componente
Dott.ssa Marta Farina	Segretaria

comunica i quesiti relativi alla prova orale:

**GRUPPO DI QUESITI N. 1**

- 1 Tecniche di isolamento e colture virali.
- 2 Pseudomonas Aeruginosa: meccanismi di resistenza
- 3 Tecniche di cell-sorting

Brano in inglese:

The mean weight gain at six months from the start of treatment was 4.6 kg (95% CI: 2.3-6.9) for the 10 patients with underweight, 3.2 kg (95% CI: 2.3-4.0) for the 72 patients with normal weight, and 0.7 kg (95% CI: -1.6-3.0) for the 10 patients with overweight. After six months of ETI treatment, 8 (80%) of the patients with underweight transitioned to the normal weight category, while 11 (15.3%) of the normal-weight patients became overweight. The major determinants of heterogeneity in weight gain were the baseline BMI and the presence of at least one CFTR residual function mutation, explaining 13% and 8% of the variability, respectively.

Fonte: <https://pubmed.ncbi.nlm.nih.gov/37330504/>

Heterogeneity of weight gain after initiation of Elexacaftor/Tezacaftor/Ivacaftor in people with cystic fibrosis

**GRUPPO DI QUESITI N. 2**

- 1 Tecniche di estrazione del DNA
- 2 Klebsiella Pneumoniae: meccanismi di resistenza
- 3 Markers di immunofenotipo delle cellule T central memory

Brano in inglese:



We demonstrated that prevalence of OW in adults with CF in Italy is 22%. OW status is independently associated with male sex (OR 3.520, P = 0.001), pancreatic sufficiency (OR 2.873, P = 0.014) and older age at diagnosis (1.015, P = 0.042). BMI correlated with ppFEV1 ( $r = 0.337$ ;  $P < 0.0001$ ) with median ppFEV1 significantly higher in patients with OW than comparisons. We also reported preliminary data on unfavorable cardiovascular risk factors in a subgroup of patients, where median blood levels [IQR] of cholesterol and systemic hypertension [%] were significantly higher in the OW group than in the NW and UW.

Fonte: <https://pubmed.ncbi.nlm.nih.gov/34053868/>

Overweight and obesity in adults with cystic fibrosis: An Italian multicenter cohort study

### GRUPPO DI QUESITI N. 3

- 1 Tecniche di estrazione del RNA
- 2 MRSA: meccanismi di resistenza
- 3 Immunofenotipo delle cellule NK

Brano in inglese:

Cystic fibrosis is the most common life-limiting genetic disease in the Caucasian population, with median predicted survival progressively improving up to 50 years, thanks to highly standardized multidisciplinary approach. Patients with p.Phe508del homozygosity usually have poorer lung function and higher mortality rates per year than other groups. By reason of that, this population has been among the most eligible target of the cystic fibrosis transmembrane conductance regulator (CFTR) modulators, a new class of drugs that can partially restore CFTR function by the correction of CFTR misfolding and trafficking to the cell surface.

Fonte: <https://pubmed.ncbi.nlm.nih.gov/33582393/>

Elexacaftor-tezacaftor-ivacaftor: The new paradigm to treat people with cystic fibrosis with at least one p.Phe508del mutation

### GRUPPO DI QUESITI N. 4

- 1 Tecniche di estrazione proteica
- 2 Escherichia Coli: meccanismi di resistenza
- 3 Immunofenotipo delle cellule B

Brano in inglese:

The role of neutrophil elastase (NE) is poorly understood in bronchiectasis because of the lack of preclinical data and so most of the assumptions made about NE inhibitor potential benefit is based on data from CF. In this context, NE seems to be a predictor of long-term clinical outcomes and a possible target of treatment. In order to better evaluate the role of NE in bronchiectasis, a systematic search of scientific evidence was performed. Two investigators independently performed the search on PubMed and included studies published up to May 15, 2017 according to predefined criteria. A final pool of 31 studies was included in the systematic review, with a total of 2679 patients. For each paper data of interest were extracted and reported in table.



this review sputum NE has proved useful as an inflammatory marker both in stable state bronchiectasis and during exacerbations and local or systemic antibiotic treatment.

Fonte: <https://pubmed.ncbi.nlm.nih.gov/29258516/>  
Neutrophil elastase in bronchiectasis

Milano, 28 giugno 2023

La Commissione

Prof. Andrea Gori - Presidente

Dott. Andrea Gramegna - Componente

Dott.ssa Laura Madaschi - Componente

Dott.ssa Marta Farina - Segretaria