

SCIENTIFIC ABSTRACT COMPETITION

Abstract submission details

- Abstracts should be original work.
- Abstracts must contain results from health and medical research with sufficient information to describe the research.
- Abstracts describing hypothesis-driven research with clear results and outcomes will be prioritised.
- Abstracts must not exceed 300 words (excluding title, authors and affiliations) and should follow the template provided below.
- In the event that an abstract exceeds 300 words it **will not** be considered for a prize. It may still be eligible to appear in the abstract book.
- Please upload your abstract as a **Word document**.
- No more than **one** abstract should be submitted with the same presenting author.
- Abstracts presented at other conferences and meetings in the past 12 months are acceptable (as long as they are compliant with these guidelines).

How to present your abstract

ABSTRACT TITLE (CAPITAL LETTERS, ARIAL NARROW, 11PT, BOLD, JUSTIFIED)

Author name/s: Arial Narrow, 10pt, normal, justified, Presenting author underlined.

Organisation/department: Arial Narrow, 10pt, Italic, justified

Abstract text: Arial Narrow, 10pt, normal, justified

Left and right margins: 2cms

**EXAMPLE OF A COMPLIANT ABSTRACT FROM A PREVIOUS YEAR
IS ON THE NEXT PAGE**

EXAMPLE

PULMONARY FUNCTION AND FAT-FREE MASS INDEX ARE INDEPENDENTLY ASSOCIATED IN ADULTS WITH CYSTIC FIBROSIS

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Cystic fibrosis (CF) is a genetic condition affecting 1 in 2500 live births in Caucasian populations. Malnutrition in CF patients is negatively associated with pulmonary function and survival.

AIM: To identify clinical factors associated with low fat-free mass index (FFMI) in adults with CF.

METHODS: Eighty-six adults with CF (52 males, 88% pancreatic insufficient) aged 19-59 years, with mean FEV₁%predicted of 58.7% (SD 21.4) underwent body composition assessment (Dual-Energy X-Ray Absorptiometry, Lunar DPX-IQ). Measurements of FFM were divided by the square of height (m), and expressed as FFMI, which normalises FFM for the effect of height. Clinical variables including age, pulmonary function (FEV₁% predicted), CF genotype, pancreatic status, diabetes, liver disease, sputum microbiological profile, age of menarche in women, serum testosterone in males, serum albumin, interleukin-6 and TNF- α were recorded. Univariate and multivariate analyses were undertaken to assess which clinical variables were associated with FFMI. Males and females were analysed separately.

RESULTS: Mean FFMI for CF subjects was 15.8 (SD 1.1) for females and 18.3 (SD 1.9) for males ($p < 0.0001$, unpaired t -test). Univariate analysis showed that only FEV₁%predicted was correlated with FFMI ($r = 0.62$, $p < 0.0001$ in females; $r = 0.27$, $p = 0.05$ in males). No other clinical variables showed significant correlations with FFMI for either gender. Multivariate analysis showed that when the effects of other variables were accounted for, lower FEV₁%predicted was a significant predictor of lower FFMI in both females ($p < 0.0001$, $R^2 = 0.38$) and males ($p = 0.03$, $R^2 = 0.14$).

CONCLUSION: Pulmonary function and FFMI are significantly and independently associated in both females and males with CF. This highlights the importance of strategies aimed at optimising nutritional status and pulmonary function in order to improve survival and prevent complications of CF. The stronger association between FFMI and FEV₁% in females suggests that earlier intervention to prevent nutritional depletion may be indicated in female CF patients.