Fondazione Ricerca Fibrosi Cistica - Onlus
italian cystic fibrosis research foundation

XVIII Convention of Investigators in Cystic Fibrosis

(Webinar, November 19-20, 2020)

Preliminary program for oral presentations

Thursday, 19 November 2020

08.25 – 08.30 Introduction & Greetings

Session 1

BASIC MECHANISMS FOR RECOVERY OF MUTATED CFTR

Chairman: **Gambari R**. *Co-chairman*: **Borgo G.**

08.30 – 08.45 **Baroni D.**
Dissecting the rescue mechanisms mediated by CFTR correctors (FFC #3/2018, concluded)

08.46 – 09.00 **Hirsch E.**
In depth-characterization of the molecular mechanisms underlying PI3Kγ-mediated regulation of CFTR (FFC#8/2018, concluded)

09.01 – 09.15 **Gambari R., Corradini R.**
Revealing the microRNAs-transcription factors network in cystic fibrosis: from microRNA therapeutics to precision medicine (CF-miRNA-THER) (FFC#7/2018, concluded)

09.16 – 09.30 Discussion (Replies to chat interventions)
09.31 – 09.40 Technical break

09.41 – 09.55 **Aureli M., Tamanini A**.
Development of ganglioside GM1-based therapy to improve F508delCFTR rescue approaches (FFC#2/2018, concluded)

09.56 – 10.10 **Luini A., Tamanini A., Borgatti M.**
Targeting the signalling network controlling proteostasis and inflammation to rescue F508del-CFTR (FFC#7/2019, concluded)

10.11 – 10.25 **Salvi M.**
Functional role of post-translational modifications in F508del correction (FC#11/2019, concluded)

10.26 – 10.40 Discussion (Replies to chat interventions)
10.41 – 11.00 Coffee and technical break

Session 2

THERAPY ORIENTED *IN VITRO/EX VIVO* PREDICTIVE MODELS (*Theratyping*)

Chairman: **Galietta L.** *Co-Chairman:* **Braggion C.**

11.01 – 11.15 **Eramo A., Lucarelli M.**
Establishment of Conditionally Reprogrammed Airway Epithelial Stem Cell cultures from nasal epithelia of Cystic Fibrosis patients: exploring response to CFTR-modulating drugs for correlation with genetic profile (theratyping) and restoring CFTR function through gene editing approaches (FFC#12/2018, concluded)

11.16 – 11.30 **Sorio C.**
Testing intestinal organoids for the prediction of response to CFTR potentiators and correctors used in clinic (FFC#13/2018, concluded)

11.31 – 11.45 **Frulloni L., de Jonge H., Lucidi V.**
Intestinal organoids for assessment and pharmacological correction of abnormalities in fluid transport and anion currents in patients affected by pancreatitis (FFC#6/2018, concluded)

11.46 – 12.00 Discussion (Replies to chat interventions)
12.01 – 12.10 Technical break

12.11 – 12.25 **Averna M., Marengo E.**
Multiomic approach for the identification of new leukocytes biomarkers directly related to a restored CFTR activity following ex vivo treatment with VX770 12/19 (FFC#12/2019, concluded)

12.26 – 12.40 **Laudanna C.**
Monocyte integrin activation as a cystic fibrosis drug evaluation test (FFC#13/2019, concluded)

12.41 – 12.55 **Pedemonte N., Cavalli A.**
Theratyping orphan mutations in Italian cystic fibrosis patients: efficacy of CFTR modulators and RNF5 inhibitors (FFC#9/2019, in progress)

12.56 – 13.10 **Netti P., Di Bernardo P.**
Investigating epithelial-stromal crosstalk in full thickness cystic fibrosis model on chip for evaluating novel therapeutic strategies (FFC#14/2019, in progress)

13.11 – 13.30 Discussion (Replies to chat interventions)
13.31 – 14.00 Lunch and technical break

Session 3

CLINICAL ISSUES

Chairman: **Cipolli M.** *Co-chairman:* **Gangemi M.**

14.01 – 14.15 **Pasut G., Percudani R.**
Therapeutic potential of a long-acting lung-specific DNase (DNase2b) for the treatment of CF (FFC#9/2018, concluded)

14.16 – 14.30 **Romano M., Lanuti P.**
Identification and validation of circulating microvesicle analysis as a new ex vivo assay to monitor cystic fibrosis disease (FFC#29/2018, concluded)

14.31 – 14.45 **Bartoloni A., Viscoli C., Cariani L., Fiscarelli E.**
Aspergillus pulmonary disease in cystic fibrosis (CF) patients: multicentre perspective observational study based on new diagnostic tests to evaluate the prognostic value on the CF disease (FFC#26/2018, concluded)

14.46 – 15.00 Discussion (Replies to chat interventions)
15.01 – 15.10 Technical break

15.11 – 15.25 **Palleschi A., Aliverti A.**
Use of multivolume MRI instead of ionizing imaging techniques for surveillance in young patients after lung transplantation for cystic fibrosis (FFC#27/2018, concluded)

15.26 – 15.40 **Terlizzi V., Padoan R., Tosco A., Claut LE.**
Cystic Fibrosis screen positive inconclusive diagnosis (CFSPID): an italian multicenter survey evaluating prevalence, clinical data, management and outcome (FFC#30/2018, concluded)

15.41– 15.55 **Casciaro R., Graffigna G.**
Patient Engagement in Cystic Fibrosis: a cross sectional multi-stakeholder study (FFC#25/2019, concluded)

15.46– 16.00 Discussion (Replies to chat interventions)

Friday, 20 November 2020

Session 4

NEW PATHS TO RESCUING MUTATED CFTR

Chairman: **Pedemonte N.** *Co-chairman:* **Dechecchi C.**

08.31 – 08.45 **Barraja P., Scudieri P.**
Towards the discovery of new correctors based on nitrogen heterocyclic systems (FFC#4/2018)

08.46 – 09.00 **Armirotti A.**
Proteomic profiling of F508del-CFTR cells to identify new pharmacological targets for CF (FFC#1/2019)

09.01 – 09.10 Discussion (Replies to chat interventions)

09.11 – 09.25 **Duga S., Melfi R.**
Small molecules modulating splicing as novel CFTR amplifier drugs (FFC#5/2019, concluded)

09.26 – 09.40 **Rusnati M., Fossa P., Orro A.**
Rescuing defective CFTR applying a drug repositioning strategy based on computational studies, surface plasmon resonance and cell-based assays (FFC#10/2019, concluded)

09.41 – 09.50 Discussion (Replies to chat interventions)
09.51 – 10.00 Technical break

Session 5

NEW APPROACHES TO ANTIMICROBIAL TREATMENTS

Chairman: **Cirilli N.** *Co-chairman:* **Lorè N.**

10.01 – 10.15 **Pasca MR.**
New weapons against *Mycobacterium abscessus* and other nontuberculous mycobacteria (FFC#19/2018, concluded)

10.16 – 10.30 **Cirillo DM.**
Preclinical evaluation of liposomes carrying bioactive lipids as an immune therapeutic tool against in vitro and vivo infection with *Mycobacterium abscessus* (FFC#17/2019, concluded)

10.31 – 10.40 Discussion (Replies to chat interventions)

10.41 – 10.55 **Notomista E., Pizzo E.**
In vitro and in vivo efficacy of an antimicrobial and antibiofilm designed peptidomimetic against CF lung pathogens (FFC#18/2018, concluded)

10.56 – 11.10 **Sanguinetti M., Vitali A., Iafisco M., Catalucci D.**
Biocompatible and inhalable antimicrobial-loaded nanoparticles for the counteraction of biofilm formation and antibiotic resistance: towards a potential new therapy for CF related infections (FFC#20/2018, *concluded*)

11.11 – 11.30 Discussion (Replies to chat interventions)
11.31 – 11.50 Coffee and technical break

Session 6

INFLAMMATION IN CYSTIC FIBROSIS: AN OBSTACLE COURSE

Chairman: **Cabrini G.** *Co-chairman:* **Aureli M.**

11.51 – 12.05 **Romani L.**
Pharmacology and therapeutics of inhaled indoles, as aryl hydrocarbon receptor ligands, in cystic fibrosis (FFC#24/2018, concluded)

12.06 – 12.20 **Dechecchi MC., Guaragna A.**
Evaluation of anti-inflammatory treatments for CF lung disease in murine models of lung infection in vivo: insights on the anti-inflammatory effect of β-sitosterol and anti-inflammatory/anti-infective activity of L-Miglustat (FFC#20/2019, concluded)

12.21 – 12.35 **Lampronti I., Chilin. A**
Multi-task evaluation of TMA analogues as antiinflammatory treatments for CF lung disease (FFC#22/2019, concluded)

12.36 – 12.50 Discussion (Replies to chat interventions)
12.51 – 13.20 Lunch and technical break

13.21 – 13.35 **Antonelli G.**
Ex vivo study on Type I and III interferon response and virus–bacteria interactions in fibrosis cystic patients: a new approach to try to develop alternative therapeutic strategy (FFC#14/2018, concluded)

13.36 – 13.50 **Cigana C.**
Off-target effects of CFTR-modulators in preclinical infection models (FFC#15/2018, concluded)

13.50 – 14.04 **Pistocchi AS.**
Potential action of phages as immunomodulators in cystic fibrosis (FFC#23/2019, concluded)

14.04 – 14.19 *Discussion (Replies to chat interventions)*

14.19 – 14.24 *Closing Remarks*

Note. Chat interventions are only possible in written form directly on the screen and are reserved for registered participants