BESTCILIA

<u>Better Experimental Screening and Treatment for Primary Ciliary Dyskinesia</u>



Bestcilia

- Rozpoczęty 3 lata temu
- 7 PR UE
- Współpraca z prof. Heymutem Omranem
- konsorcjum

Konsorcjum

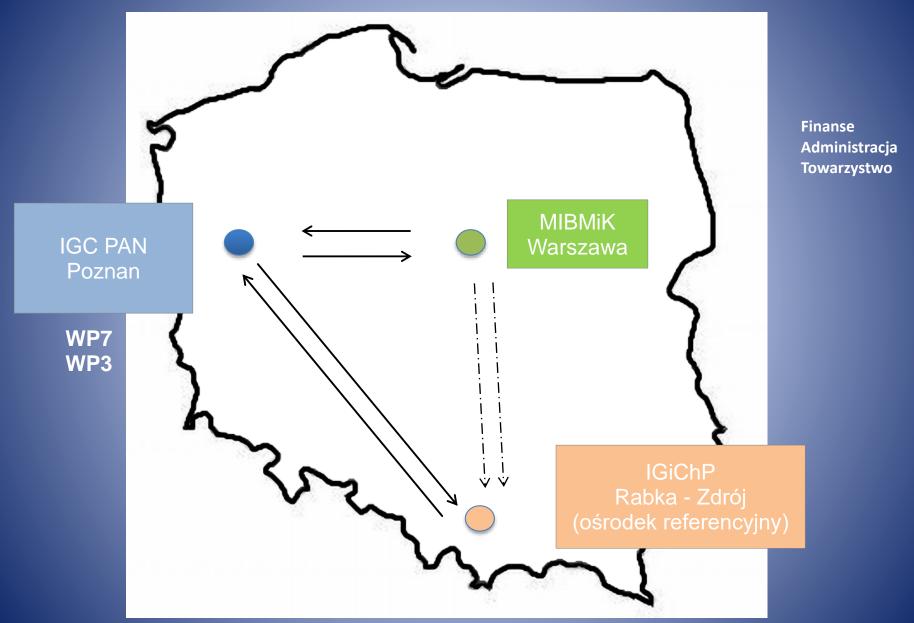
no.	Participant legal name	short name	Country	Organisation type
1	Westfälische Wilhelms- Universität Münster	WWU	DE	University (hospital)
2	University of Bern	UBERN	CH	University
3	Cyprus University of Technology	CUT	CY	University
4	University of North Carolina	UNC	USA	University (hospital)
5	Copenhagen University Hospital, Rigshospitalet	Region H	DK	University (hospital)
6	VU University Medical Center Amsterdam	VUMC	NL	University (hospital)
7	University of Southampton	SOTON	UK	University (hospital)
8	University of Miami	UM	USA	University (hospital)
9	International Institute of Molecular and Cell Biology, Warsaw	IIMCB	PL	Research Institute
10	University of Athens	UA	GR	University (hospital)
11	European Research Services GmbH	ERS	DE	Consultancy
12	Royal Brompton and Harefield National Health Service Trust	RBH	UK	University (hospital)

Główne cele

- Badania obserwacyjne charakteryzujące europejskich chorych na PCD - metaanaliza
- Ustanowić bazę danych do prospektywnej zbiórki danych o chorych (występowanie, objawy, leczenie przebieg)
- Wprowadzenie europejskiego standardu diagnostycznego (Cypr, Grecja, Polska)
- Opracowanie europejskiego kwestionariusza badania jakości życia
- Próba kliniczna z azytromycyną



Organizacja pracy



WP3

WP3 – nowoczesna diagnostyka

- Zakup aparatury do badania stęż. tlenku azotu w nosie (Ecomedics CLD88, NIOX MINO), kamera video, SAVA system
- Wypracowanie dokładnej standaryzowanej instrukcji prowadzenia badań
- Konsultacje uzyskanych wyników i obrazów
- Przebadanie grupy pacjentów z lat poprzednich oraz nowych
- Porównanie wyników czy nowe metody coś dają?

WP7 - upowszechnienie

- Strona internetowa
- Broszura (6 języków, 7 krajów)
- Szkolenia wewnętrzne (3, w tym Kraków)
- Warsztaty specjalistyczne dla klinicystów (2, jw.)
- Upowszechnienie: EUREK Alert, AlphaGalileo)



Kraków 2013

report session

conference

search meeting of Bestcilia participants.

INVITATION FOR THE MEETING (PDF, 0.3 MB)

HOTEL BOOKING FORM (Word 0.8 MB)

2013, Naples, Italy

We would like to warmly invite you to the International Conference on Primary Ciliary Dyskinesia (PCD), which will take place from 20 to 22nd of March 2014 in Athens, Greece.

The program of the conference will include lectures of the internationally recognized PCD.

experts and a specialist workshop covering all aspects of state-of-the-art PCD diagnostics.

In addition, in parallel to the workshop, you will be able to participate in an open-to-public re-

Participation in our conference is free-of-charge and everybody is welcome to participate.

We hope you will find the program interesting and we are looking forward to see you on our

Bestcilia consortium meeting, 23 of November

On 23nd of November 2013, Bestcilia participants have met in Naples, Italy. During the

meeting, the leaders of each workpackage have presented the progress of work within each

Apart from reporting the work, during the meeting, a short workshop on the health-related

quality-of-life questionnaires (HRQOLQ) took place. The workshop was led by an external

speaker, Alexandra L. Quittner (University of Miami, USA), who, together with Laura Behan

and Jane Lucas (University of Southampton, UK) have presented the design and optimiza-

nation activities. Participants have also debated on the organization of the future meeting in

Athens, Greece. It has been decided, that the meeting will take place from 21 to 23 March

2014 and will be connected with a specialized workshop for clinicians on PCD diagnostics

tion of HRQOLQs in PCD. The presentations have been followed by discussions with all

Please see below for the details of the program and registration.

workpackage and discussed work schedule for the nearest future.

participants on the use of the HRQOL in clinical trials.

21-23 of March 2014: PCD workshop/Bestcilia



NEWS

- O Update in WP1
- O Update in WP5
- O Progress in WP2 O 20-23 of March 2014: PCD
- workshop/Bestcilia report session
- O Progress in WP4 O WP3 update
- O New Year wishes
- O BESTCILIA: PCD diagnostic workshop 11 to 12 July 2013 Münster, Germany
- O Bestcilia consortium meeting, 23 of November 2013, Naples, Italy
- O Kick-off Meeting in Limassol, Cyprus

EVENTS

- O Bestcilia meeting/PCD workshop 20 to 23 March 2014 in Athens, Greece
- O ERS School Course on "Primary ciliary dyskinesia: sharing knowledge and experience across Europe"
- 21 to 23 November 2013, Naples, Italy O FRS annual congress
- 7 to 11 September 2013, Barcelona, Spain O Bestcilia consortium meeting
- 23 November 2013, Naples, Italy

Datasets from more than 2000 PCD patients identified! (Progress in Work Package 1-WP1)

WP1 has been progressing according to plan. It's goal is to analyze existing clinical and epidemiological PCD datasets. This will allow to generate first representative data on clinical presentation, growth and development in PCD patients, as well as information on treatment effects and long-term prognosis for this orphan lung disease. So far, datasets from more than 2000 PCD patients have been identified and will soon be ready for analy-

In a first step, existing PCD datasets have been identified by performing a systematic electronic search on published studies and conference abstracts. Unpublished datasets from members of the European Respiratory Society (ERS) PCD taskforce and other researchers have then been added to the list. So far, datasets for more than 2000 PCD patients have been identified and are potentially available for analyses.

In parallel, UNIBE has created the infrastructure necessary for the study by setting up data ownership, transfer and publication agreements, which leave all rights with data contributors. Furthermore, a safe IT platform for uploading anonymised data has been set up, and a precise description of desired variables has been compiled.

Several datasets have already been received and the process of cleaning, standardising and pooling of the data has begun. After the standardisation, the datasets will be available

for first analyses. In the near fut vidual patient data meta-analysis characteristics of the patient pop tions, lung function and growth

Update in WP1

July 2013 Münster, Germany

penditures), but also other partners participated in this meeting.

BESTCILIA: PCD diagnostic workshop 11 to 12

In July 2013, Bestcilia partners have met in Münster, Germany, for an internal training on

PCD diagnostics. The training was directed to participants of the workpackage 3 (Introduc-

tion of Standardized Diagnostic PCD Testing in European Countries with limited Health Ex-

At first, the general diagnostic algorithm for PCD was presented. Later lectures concerned

application of different methods of detecting and confirming PCD, such as nasal NO mea-

of PCD-causative mutations. Meeting consisted both of lectures and practical hands-on

training, moreover, participants exchanged their experiences in use of various diagnostic

surement, transmission electron microscopy, immunofluorescent staining and identification

reste

ARE READY!

A number of general issues was also discussed, including publications and other dissemidevelop and validate PCD- specific health related quality of life questionnaires (QOL-PCD). The questionnaires have been developed in English and translated into a

Bestcilia participants from SOTON, UNC and UM developed the PCD- specific health re lated quality of life questionnaires (QOL-PCD, workpackage 4), with significant support fr UNC, University College Cork, Royal Brompton Hospital. Participation

Family Support Group UK and PCD Foundation USA has been vita

the parents of chill Best cilia investigator awarded with a grant!

IL-PCD followed @ GRANT FOR BESTCILIA INVESTIGATOR TO STUDY NOVEL METHODS OF

ton and Harefield NHS Foundation Trust, London, UK), have received a three-year Health-care Scientist Post-Doctoral Fellowship from the National Institute of Health Research (UK), Starting from April 2014, the lead scientist Amelia Shoemark who has won this award, will test novel methods of diagnosing PCD. If proved successful, they hope to significantly improve PCD diagnostics!

vs development (electron microscopy. In 15-30% of children who have PCD, the cells look normal, and false naires will be easy negative results can delay diagnosis and the commencement of appropriate therapies. The purpose of this NIHR funded project is to test the use of novel approaches using 3D electron tomography to better define the ultrastructural defects that cause PCD. Increasing our related versions w understanding of ciliary ultrastructure and function aims to reduce diagnostic dilemmas and ing patients partic

> Amelia Shoemark, the lead scientist for the diagnostic service, and her team have already tried modern approaches to the analysis of ciliary structure. In their work published last year in Thorax, they visualized cilia by electron tomography (3D electron microscopy), finding significant differences in the ultrastrucure of cilia that had previously be undetectable using o

Now, thanks to the funding from the National Institute of Health Research, the group will be able to determine the usefulness of this and other novel techniques on a large number of patients. If this study proves successful, this research team might significantly accelerate the diagnostics of PCD by improving the effectivity of citia visualization

methods. During the meeting, a number of general issues were discussed. At the end of the training, participants agreed to meet on 23rd of N PROJECT

Update in WP5 AZITHROMYCIN TRIAL IN PCD (WP5): PATIENTS' RECRUITMENT WILL

(Progress in Work Package 5)

Azithromycin is a widely used macrolide antibiotic, used for treatment of infection and as maintenance therapy in some chronic respiratory diseases. The aim of Bestollia Work Package 5 (WP5) is to evaluate the efficacy and safety of azithromycin as maintenance therapy in PCD patients, which has so far not been assessed. This will be done through a randomized, placebo-controlled trial. We are delighted to inform that preparations for the trial have almost been finished and patient recruitment will start in spring 2014.

Azithromycin is an authorized drug widely used to treat infections and used as maintenance therapy in some chronic respiratory diseases, including PCD. However, the efficacy and safety of the use of this macrolide antibiotic as maintenance therapy in PCD nationts, has not yet been evaluated. Such scientific, randomized, placebo-controlled trial of azithromycin is the aim of Bestoilia WP5

This multi-national initiative will be conducted by Bestellia partners from six institutions and 1/2 five countries: Westfälische Wilhelms-Universität, Münster (Germany), University of Bern etzerland), VU University Medical Center Amsterdam (The Netherlands), University of Southampton (United Kingdom), Royal Brompton Hospital (United Kingdom) and Copenhagen University Hospital Rigshospitalet (Denmark).

In the past year the partners have been working intensively on the design of the trial and are now in the process of obtaining the required approvals from health authorities and ethics committees in the participating countries

A special workshop in 'Nitrogen Multiple Breath Washout' was organized in Nove in Copenhagen in order to ensure standardization in the measurement and analysis of ventilation inhomogeneity between the participating centres. The 'Lung Clearance Index' (LCI), which is one of the outcomes that can be obtained by Nitrogen Multiple Breath Washout, is one of the new exploratory outcome measures of the trial.

Recruitment of the 125 PCD patients for the trial is planned to begin in spring 2014



Progress in WP2

PCD registry (WP2) is up and running!

International registry of PCD patients, which is the aim of Restcilia Work Package 2 (WP2), will be ready for data entry from January 2014. The registry will allow systematic collection of data on incidence, clinical presentation, treatment and course of PCD, All the preparatory work has been done and the recruitment of patient will start soon.

During last year partners involved in WP2 have been working intensively on the generation of the PCD registry. During and beyond the duration of Bestcilia project, the registry will be a wonderful instrument that will show some general trends in the clinical presentation, diagnostic accuracy and applied treatments in PCD. It will also allow to examine changes in long-term outcomes and recruit patients for multicentre clinical studies

In the first step of the work, WWU has proposed potential items (patient parameters), which will be anonymously collected in the registry. ERS PCD Task Force experts and patient groups from Germany, Netherlands and USA had a significant role in this step. The potential parameters were later discussed by the partners from WWU, UBERN, UNC, SOTON and Region H to include items, which are most universal/most informative. Care has been taken to include parameters allowing comparisons with other datasets collected at present (US PCD registry) and in the past (for example with datasets generated during Bestcilia

ACTIVITIES :linica

recial Progress in WP4

try will Today another update on the progress within Bestcilia:

PCD-SPECIFIC QUALITY OF LIFE QUESTIONNAIRES (WP4) IN ENGLISH

Work Package 4 (WP4) has progressed extremely well this year. The aim of WP4 is to

number of languages, ready for validation.

omplicated proces

ts internationally.

Freatment for Print

13 the 4 prototype

ig FDA and Europ DIAGNOSING PCD! rviews with a large. We are proud to inform you, that Bestcilia investigator, Claire Hoggs team (Royal Brompperation between lesigned to be app culture and use of

> Primary Ciliary Dyskinesia (PCD) is diagnosed by the examination of cells using light and accelerate the diagnosis by improving our pick up rate and accuracy.

asked to complet ins. As soon as th also to other land rent standard electron microscopy.

Bestcilia publication about BMI and spirometry in **PCD** patients

Bestcilia publication: Relation of body mass index, lung function and sputum microbiology in PCD

Bestcilia investigators, members of the Advisory Board and collaborating teams have joined forces to perform a longtidunal study of the relationship between the body mass index (BMI), spirometry and sputum pathogens in PCD patients. Thanks to this collaboration, a group of over 150 PCD patients attending PCD referral centers in 3 countries has been analyzed. In agreement with the hypothesis, the results have shown that in PCD subjects receiving centralized care, nutrition and spirometric indices remain stable during medium term follow-up. Furthermore, BMI seems to be completely normal in PCD patients. More information and the link to the article full text can be found here.



New Year wishes within Bestcilia workpackages (WP). Today, information on WP3



progressed in all areas necessary to achieve these goals (purchase and setting of equipment, receiving approval of local Ethics Committees, SOPs development and staff training). The last goal was reached through the training workshop held at the University of Münster in

sistent with ERS diagnostic guidelines.

WP3 update

Germany. The workshop dealt with the basic diagnostic methods for PCD: electron microscopy (EM); high speed video microscopy (HSVM) and nasal nitric oxide (nNO) measurements, as well as the implementation of immunofluorescence techniques for confirming diagnostic results. The workshop was extremely successful, and apart from participants from Cyprus, Greece and Poland, physicians and researchers from other Bestcilia-participating countries were also present. Based on this success, it was decided to organize a second workshop on that subject,

Realization of Work Package 3 (WP3) is following the schedule: WP3 aims to establish

standardized PCD diagnostic testing in three European countries with limited health expen-

ditures. During last year, Bestcilia WP3 participants have worked hard and significantly pro-

gressed in all areas necessary for achieving this goal. In few months, PCD patients from

Cyprus, Greece and Poland will be able to get a reliable diagnosis of their condition, con-

Establishing standardized PCD diagnostics in Cyprus, Greece and Poland will be achieved

through establishment of national PCD diagnostic centers, development and introduction of

standardized operational procedures (SOPs) and diagnostic algorithms for diagnostic PCD

testing. During last year, Bestcilia participants from these three countries have significantly

open for all BESTCILIA and ERS PCD Task Force members. The workshop will take place in March 2014 in Athens, Greece. More information on this issue will follow soon. Moreover, Bestcilia members have intensively discussed the details of SOPs and diagnos-

tic algorithm to be implemented in PCD centers in Cyprus, Greece and Poland. The SOPs for nNO measurements are almost completed and SOPs for other PCD diagnostic methods are still being discussed. Therefore, within few months, suspect patients will be able to visit PCD centers in their country and get a reliable diagnosis consistent with ERS diagnostic auidelines.





BESTCILIA



NEWS

- O Update in Work Package 2
- New publication by Bestcilia partner: further insight into PCD through a study on the Irish Traveller population
- New Bestcilia publication: new quality-of-life measure for adult PCD patients
- O Update in WP 5
- O Update in Work Package 3
- O Update in WP4
- O Huge success of the first Young Researchers Meeting in Bern!
- O Update in Work Package 1
- O Easter wishes
- O New Bestcilia article: How does lobectomy

PROJECT

ACTIVITIES

CONSORTIUM

W

What is PCD?







Was ist Primäre Ziliäre Dyskinesie? (PDF, 0.2 MB) (ZIP, 0.2 MB)



What is PCD?

(PDF, 1.7 MB) (ZIP, 1.7 MB)





Wat is Primaire Ciliaire Dyskinesie? (PDF, 7.7 MB) (ZIP, 7.7 MB)



Τι είναι η ΠΔΚ - Πληροφορίες για ασθενείς (PDF, 1.5 MB) (ZIP, 1.5 MB)



Τι είναι η ΠΔΚ - Πληροφορίες για ασθενείς (PDF, 1.5 MB) (ZIP, 1.5 MB)



CZYM JEST PCD?
(PDF, 1.5 MB) (ZIP, 1.5 MB)

Hyad er PCD2

CZYM JEST PCD? Broszura informacyjna dla pacjentów

Autorami niniejszego tekstu są polscy uczestnicy programu <u>Bestcilia</u>: dr Zuzanna Bukowy-Bieryłło, prof. Michał Witt, prof. Ewa Ziętkiewicz, prof. Henryk Mazurek, dr Andrzej Pogorzelski.

Tekst częściowo został przygotowany w oparciu o materiały o PCD dostępne na stronie internetowej PCD Family Support Group w Wielkiej Brytanii (www.pcdsupport.org.uk), jak również broszurę przygotowaną przez niemieckich członków programu Bestcilia: dr Julię Wallmeier, dr Claudiusa Wernera i prof. Heymuta Omrana z Klinik für Kinder-und Jugendmedizin, Universitätsklinikum Münster w Niemczech.

W procesie tworzenia tej broszury, lekarze uwzględnili różnice regionalne oraz kulturowe w sposobach opieki nad pacientami z PCD. Należy wziać pod uwage, że w chwili obecnej nie ma



Broszura informacyjna dla pacjentów

Dzisiejsze spotkanie

- Organizacja spotkania p. Agnieszka Ziemka
- Warsztaty szkoleniowe
- Reaktywacja Towarzystwa

