



Better Treatments for Breathlessness in Palliative and End of Life Care



BETTER-B trial processes and delivery



Project Manager: Dr Adejoke Oluyase
Cicely Saunders Institute, King's College London



BETTER-B is funded by the European Union's Horizon2020 research and innovation programme under grant agreement No. 825319. The views expressed in this presentation are those of the author(s) and not necessarily those of the funders.

Follow us on twitter: #betterbreathe

www.better-breathe.eu

DISCLOSURE

- Name: Adejoke Oluyase
- Affiliation: King's College London
- Relationships with for-profit and not-for-profit interests: None
- Grants/Research Support: Medical Research Foundation
- Consulting fees: None
- Other (including employment): None

The BETTER-B Trial

- **Design:** International, multicentre, Phase III, double-blind, randomised, placebo-controlled trial.
- **Funding:** The European Union's Horizon 2020 Research and Innovation Programme under grant agreement No. 825319.
- **Participants:** COPD, ILD patients with Modified Medical Research Council Dyspnoea Scale grade 3-4
 - Grade 3 (I stop for breath after walking about 100 yards or after a few mins on level ground) or
 - Grade 4 (I am too breathless to leave the house or I am breathless when dressing or undressing)
- **Procedures:** Randomised 1:1 to oral mirtazapine 15mg/day or placebo, assessments at baseline, day 7, 14, 28, 56, 180
- **Clinical end points (at 56 days)**
 - 'Worst' and 'average' breathlessness over the past 24 hours using NRS
 - Chronic Respiratory Questionnaire (CRQ)
 - Integrated Palliative care Outcome Scale (IPOS)
 - Hospital Anxiety and Depression Scale (HADS)
- **Qualitative interviews & health economics**

BETTER-B Main Trial Objective

- To determine whether mirtazapine (a repurposed medicine) is an effective treatment for the reduction of self-reported worst breathlessness (as measured by a numerical rating scale (NRS)) at 56 days post start of treatment compared to placebo in patients with COPD or ILD.

BETTER-B Sites

12 sites in **Europe**:

- 3 UK sites
- 3 Italian sites
- 3 German sites
- 2 Ireland sites
- 1 Poland site



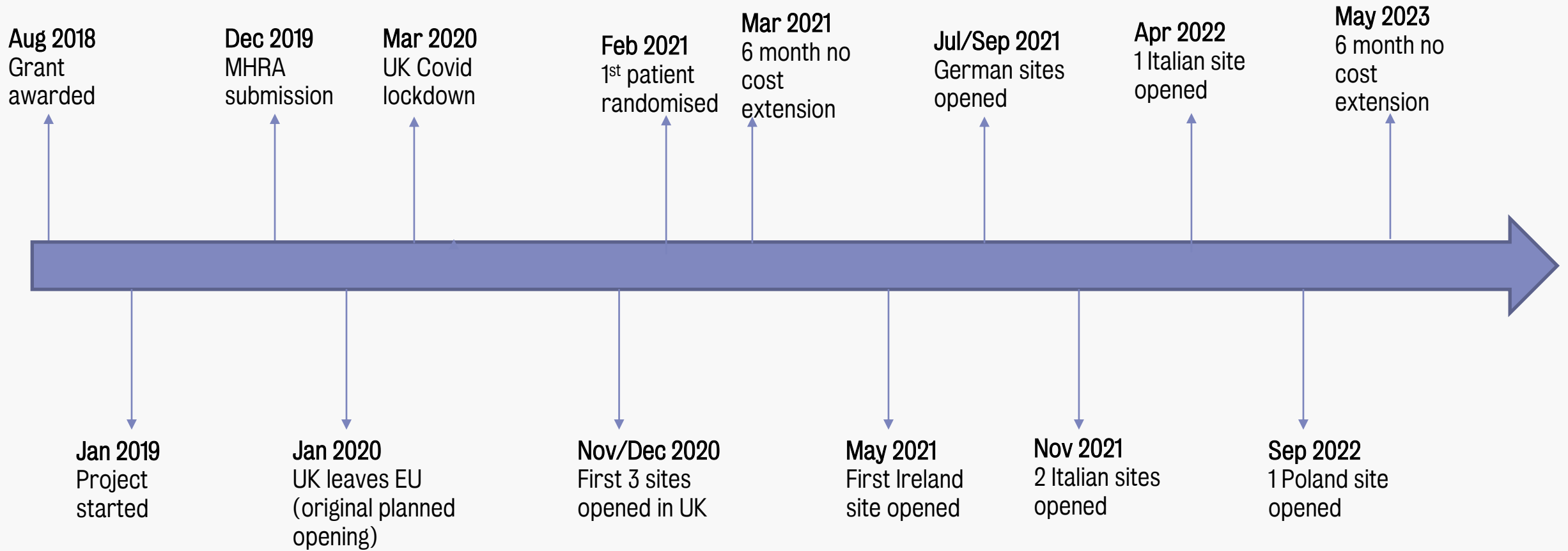
Parallel Study in Australia using the same protocol but sponsored by the University of Technology Sydney, funded by the NHMRC – European Union under Application ID: APP1170731.

Numbers recruited:

272 UK/EU participants (205 patients/67 caregivers)

28 Australia/New Zealand participants (20 patients/8 caregivers)

BETTER-B Timeline



Sponsorship & contracting

Risk No.	Description of risk	Level of risk	WP(s) involved	Proposed risk-mitigation measures
1	UK leaving the EU in 2019 (Brexit) – current uncertainty regarding UK legislative requirements and status of UK sponsor within EU post Brexit.	High	2-5	Co-sponsorship between KCL and UCD will ensure all regulatory and legislative requirements for clinical trial conduct will be met in both the EU and UK post Brexit.
2	Implementation of Clinical Trials Regulation in 2019 across EU prior to start of Clinical Trial.	Low	2,3	Co-sponsor UCD based in EU will manage EU Portal requirements.

Sponsorship & contracting

- BETTER-B: clinical trial of an IMP, Clinical Trial Authorisation (CTA)
Applications were submitted to medicines regulators in participating countries.
- Different legal requirements in EU countries e.g co-sponsorship not allowed in Germany
- * **KCL could not be added to the CTA forms for European Sites**
 - Ireland: KCL designated as having contractual responsibilities
 - Poland: KCL designated as having contractual responsibilities
 - Italy: KCL designated as having contractual responsibilities

Regulatory & ethics submissions

- Different systems e.g. own portals for uploading CTA
- Lack of information in English
- Use of fax!
- Working with local PI/team

Regulatory & ethics submissions

- At the initial stages, regulatory authorities in Italy, Germany and Poland were not accepting non-Covid applications. Germany wasn't submitted until Aug 2020 and Italy March 2021. Poland was submitted in May 2021.
- CTA resubmission occurred in both Ireland and Germany to allow for UCD to be designated as the main sponsor.
- In Italy, 4-month delay between CTA submission and trial approval due to complications in IMP arrangements post-Brexit (required 2 rounds of submission).
- In Poland, 13 month delay between CTA submission and trial approval (required 4 rounds of submission)
- Apart from the UK, ethics applications were delayed in the other EU countries as they prioritised Covid-related applications.

Response times for CTA approval

Countries	Formal CTA timelines during trial	Actual CTA timelines during trial
Germany	30 days	46 days
Italy	60 days	65 days (provisional), 117 days (full)
Ireland	25 days for first response, 60 days total	45 days
Poland	60 days	13 months
UK	60 days	42 days

Challenges experienced and mitigation measures

Challenges	Mitigation measures
<ul style="list-style-type: none">•Covid-19 and its recurrent waves➤ Participating countries de-prioritised non-Covid research➤ Fear of infection by participants/reluctance to visit hospital➤ Staff diversion to Covid-related work➤ Staff shortage/overworked staff➤ UK R & I pause to recruitment•Remote clinics/closure of clinics•Trial eligibility criteria•Brexit•Delays in receiving the IMP due to a worldwide shortage	<ul style="list-style-type: none">•Allowed for remote consent and follow-up•Opened additional PICC sites at KCH and an addition site in Ireland.•Applied for a 12 month no-cost extension•Removed cardiovascular exclusion from protocol as this impacted recruitment•Co-sponsorship between KCL and UCD•Worked with Modepharma to source another supplier

Other strategies to increase recruitment


- Regular meetings with sites to provide support
- Presentations to clinical teams at meetings
- Rewarding good practice e.g monthly newsletter showcasing sites meeting their monthly targets.
- Posters in clinics
- Newsletters etc

Translation

- Participant-facing documents were translated (PIS, consent form, subject diary, GP letter).
- Questionnaires were reviewed to check those that were translated and validated in other languages. Where these were not available, forward and backward translations were carried out.

BETTER-B Translations

Documents to be translated = All participant-facing documents (PIL, consent form, questionnaires, subject diary, GP letter)



Local teams translated English master document into native language (forward translation)



Local teams made changes necessary for local ethics approval
e.g removal of collection of race/ethnicity data in Germany




Changes sent to Sponsor for approval

BETTER-B Translations

Forward translated document translated into English (backward translation)



All translations completed by one team member, and reviewed by another team member



Translation certificates for forward & backward translations



Sponsor compared backward translation to English master documents & checked certificates



Aim: ensure faithful translation to ensure patients received the correct information

IMP

- Sourcing a product licenced in an EU country for no-deal Brexit
- Absence of production staff & prioritisation of Home Office listed products
- Increased storage costs
- Post Brexit QP release & shipment

Patient and Public Involvement (PPI)

- PPI involvement from inception
- Reviewing participant-facing documents
- Shaping the language and content of the BETTER-B website
- Co-design of dissemination strategy
- Patient involvement in the TMG and TSC

Key reflections

- Cross-national research is important in developing the evidence base.
- The new EU Clinical Trials Information System (CTIS) is a coordinated system that should help future trials.
- BETTER-B question though central to Covid-19 was de-prioritised. Palliative care should be a core part of health emergency.

