

# **DiPALS: Diaphragm Pacing in patients with Amyotrophic Lateral Sclerosis – a randomised controlled trial**

Christopher J McDermott,<sup>1\*</sup> Mike J Bradburn,<sup>2</sup> Chin Maguire,<sup>2</sup> Cindy L Cooper,<sup>2</sup> Wendy O Baird,<sup>3</sup> Susan K Baxter,<sup>3</sup> Judith Cohen,<sup>2</sup> Hannah Cantrill,<sup>2</sup> Simon Dixon,<sup>4</sup> Roger Ackroyd,<sup>5</sup> Simon Baudouin,<sup>6</sup> Andrew Bentley,<sup>7</sup> Richard Berrisford,<sup>8</sup> Stephen Bianchi,<sup>9</sup> Stephen C Bourke,<sup>10</sup> Roy Darlison,<sup>11</sup> John Ealing,<sup>12</sup> Mark Elliott,<sup>13</sup> Patrick Fitzgerald,<sup>3</sup> Simon Galloway,<sup>7</sup> Hisham Hamdalla,<sup>12</sup> C Oliver Hanemann,<sup>14</sup> Philip Hughes,<sup>15</sup> Ibrahim Imam,<sup>16</sup> Dayalan Karat,<sup>17</sup> Roger Leek,<sup>18</sup> Nick Maynard,<sup>19</sup> Richard W Orrell,<sup>20</sup> Abeezar Sarela,<sup>13</sup> John Stradling,<sup>19</sup> Kevin Talbot,<sup>19</sup> Lyn Taylor,<sup>21</sup> Martin Turner,<sup>19</sup> Anita K Simonds,<sup>22</sup> Tim Williams,<sup>17</sup> Wisia Wedzicha,<sup>20</sup> Carolyn Young<sup>23</sup> and Pamela J Shaw<sup>1</sup>

<sup>1</sup>Sheffield Institute for Translational Neuroscience, University of Sheffield, Sheffield, UK

<sup>2</sup>Sheffield Clinical Trials Research Unit, School of Health and Related Research (SchARR), University of Sheffield, Sheffield, UK

<sup>3</sup>School of Health and Related Research (SchARR), University of Sheffield, Sheffield, UK

<sup>4</sup>Health Economics and Decision Science, School of Health and Related Research (SchARR), University of Sheffield, Sheffield, UK

<sup>5</sup>Sheffield Teaching Hospitals NHS Foundation Trust, Northern General Hospital, Sheffield, UK

<sup>6</sup>Royal Victoria Hospital, Newcastle upon Tyne Hospitals NHS Foundation Trust and the University of Newcastle, Newcastle upon Tyne, UK

<sup>7</sup>University Hospital of South Manchester NHS Foundation Trust, Manchester, UK

<sup>8</sup>Plymouth Hospitals NHS Trust, Derriford Hospital, Plymouth, UK

<sup>9</sup>Sheffield Teaching Hospitals NHS Foundation Trust, Royal Hallamshire Hospital, Sheffield, UK

- <sup>10</sup>North Tyneside General Hospital, Northumbria Healthcare NHS Foundation Trust and Newcastle University, North Shields, UK
- <sup>11</sup>Independent patient and public involvement representative, UK
- <sup>12</sup>Salford Royal Hospitals NHS Foundation Trust, Salford, UK
- <sup>13</sup>Leeds Teaching Hospitals NHS Trust, St James' University Hospital, Leeds, UK
- <sup>14</sup>Plymouth University, Plymouth, UK
- <sup>15</sup>Plymouth Hospitals NHS Trust Peninsula Medical and Dental Schools, Plymouth, UK
- <sup>16</sup>South Devon Healthcare NHS Foundation Trust, Devon, UK
- <sup>17</sup>Newcastle upon Tyne Hospitals NHS Foundation Trust, Newcastle upon Tyne, UK
- <sup>18</sup>Motor Neurone Disease Association, Birmingham, UK
- <sup>19</sup>Oxford University Hospitals NHS Trust, Oxford, UK
- <sup>20</sup>The National Heart and Lung Institute, Imperial College London, London, UK
- <sup>21</sup>PAREXEL International Corporation, Sheffield, UK
- <sup>22</sup>National Institute for Health Research Respiratory Biomedical Research Unit, Royal Brompton & Harefield NHS Foundation Trust, London, UK
- <sup>23</sup>Walton Centre for Neurology & Neurosurgery NHS Foundation Trust, Liverpool, UK

\*Corresponding author

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## Plain English summary

### **DiPALS**

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## Plain English summary

The research study aimed to compare two different treatments [non-invasive ventilation alone or non-invasive ventilation given alongside diaphragm pacing (DP)] for patients experiencing breathing difficulties due to amyotrophic lateral sclerosis (ALS). ALS is another name for motor neurone disease. Non-invasive ventilation is the treatment patients usually get where they wear a face mask and air is pushed into the lungs to help breathing. DP is a possible alternative treatment in which wires are inserted into the main breathing muscle to stimulate it directly to help patients breathe. The main outcomes of the study were to see if the addition of DP improved patient survival (how long patients lived) and improved quality of life.

We conducted our research in seven UK hospitals and enrolled 74 patients to the study (37 patients in each treatment group). Patients were enrolled between December 2011 and December 2013. The study stopped early based on recommendations from the committee charged with guarding patient safety. The committee felt that DP might be causing harm to patients. Patients in the group given DP alongside standard treatment had worse average survival (11.0 months) than those in the standard treatment only (non-invasive ventilation) group (22.5 months).

Based on study results, DP should not be used as routine treatment in ALS patients with breathing problems.

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Editorial contact: [nhredit@southampton.ac.uk](mailto:nhredit@southampton.ac.uk)

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