



## **The Cell Therapy Catapult UK Clinical Trials Database as of April 2014**

The UK Clinical Trials Database covers cell therapy clinical trial activity that the Cell Therapy Catapult believes to be ongoing in the UK as of April 2014. It supercedes the database of April 2013, and both are available on our website.

It has been compiled and verified by the Cell Therapy Catapult team, and includes:

- academic and commercial trials approved for inclusion by the sponsor
- ongoing trials in the UK, regardless of the nationality of the sponsor
- all trials involving cells as therapeutic agents\*

\* excluding trials of haematopoietic stem cell transplantation regimens and gene therapy vectors for genetic modification in vivo, but including ex vivo genetic modification of cells which are then administered to patients

Significant changes versus the previous version of the database are discussed in more detail below.

The database is updated annually, and provides what we believe to be the most comprehensive and accurate review of the UK clinical trial landscape as of April 2014. The input of the cell therapy community is important to help us maintain its relevance, and we welcome your updates, additions and corrections, which you can send to us [here](#).

### **The purpose of the Cell Therapy Catapult UK Clinical Trials Database**

As a centre of translational excellence in the UK, the Cell Therapy Catapult is progressing a portfolio of projects with the UK and international community. The UK Clinical Trials Database forms an important part of the mechanism by which the Cell Therapy Catapult identifies potential programmes for investment or partnership, and provides a highly relevant measure of progress in the field. Finally, we hope that the database will be of use to academics, researchers and commercial organisations operating in the cell therapy space by allowing them to understand the extent of cell therapy activity in the UK.

It is complemented by a UK Preclinical Research Database, which covers cell therapy projects that we believe to be two or less years from the clinic and enables us to track trends, make predictions about clinical pipeline development and plan strategically.

The interesting trends the clinical trial database highlights are discussed below, with

\* indicating findings where analysis was possible.

## UK Cell Therapy Clinical Trials Database - commentary on key findings

There are 41 cell therapy clinical trials ongoing in the UK, with the majority in the recruitment phase, according to the information in the Cell Therapy Catapult database for which approval and verification was available. This is an increase of 7 on the 34 ongoing clinical trials in 2013.

We believe nine of the 41 trials in the 2014 database to be new, as shown in the table below comparing the data with that of the 2013 review.

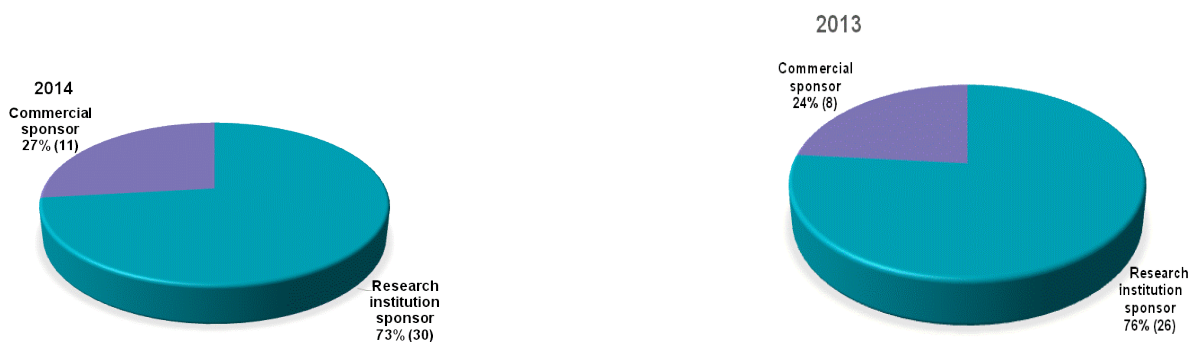
### Ongoing clinical trials in the UK, 2014 & 2013

Year	Number of clinical trials ongoing	Number of new open trials
2014	41	9
2013	34	5

### Majority of UK clinical trials are sponsored by a research institution

The number of company-sponsored ongoing clinical trials has increased from 8 in 2013 to 11 in 2014 but this means company sponsored trials are still only a relatively small proportion (27%) of the total. This kind of split was also observed in the 2013 database, and reflects the relatively early stage of the clinical trial pipeline as discussed later.

### Clinical trial sponsorship in the UK, 2014 & 2013



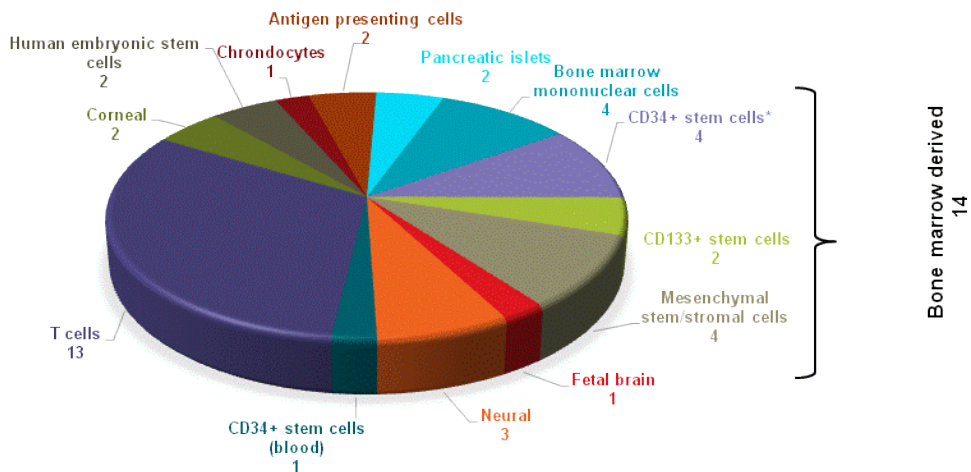
Split between autologous and allogeneic approaching 1:1 in 2014  
 The 1:1 split in 2014 compares with a ratio of 2:1 in 2013.

### Autologous vs allogeneic cell therapies in UK clinical trials, 2014 & 2013

%	Autologous	Allogeneic
2014	56	44
2013	68	32

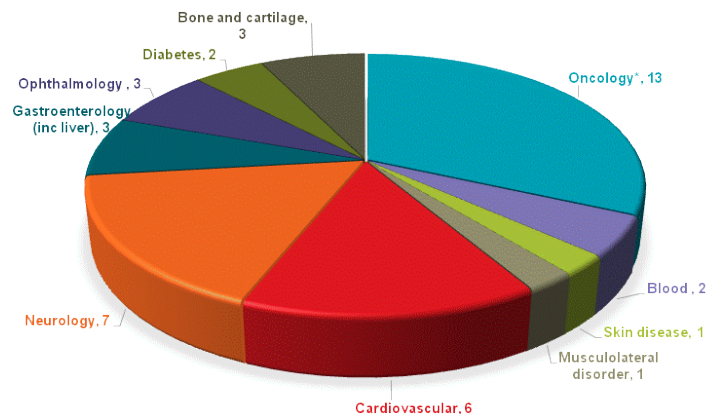
Diverse cell types in trials - bone marrow-derived and T cells predominate  
 With 13 T cell-based clinical trials and 14 involving bone marrow-derived cells, these types dominate the landscape, with the number of T cell trials up from 9 in 2013.

### Breakdown of cell types in UK clinical trials, 2014



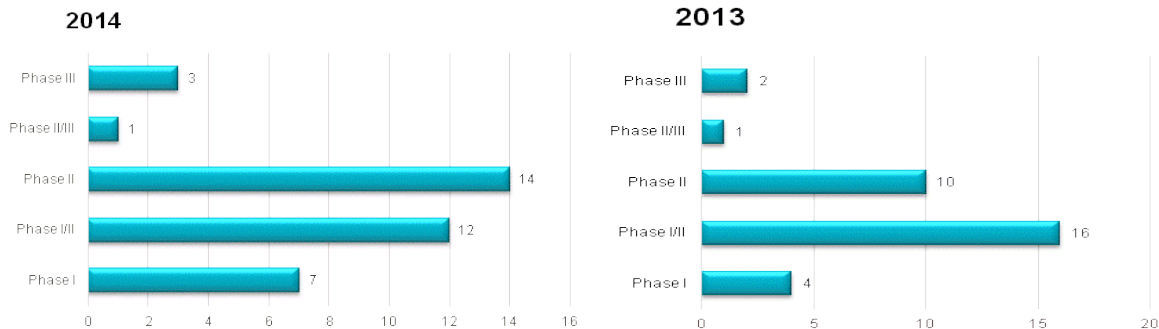
Oncology indications dominate in 2014 clinical trial database  
 With four additional clinical trials in the 2014 database, oncology trials dominate with 13 ongoing. Behind oncology, there is significant trial activity in neurological and cardiovascular diseases, with seven and six studies ongoing respectively.

### Breakdown of UK clinical trials by therapeutic area, 2014



## *The majority of cell therapies are in Phase I/II or II trials*

The trials in the UK Cell Therapy Database are mainly early stage\*, as follows:



### *Database utility for cell therapy developers*

As well as providing the Cell Therapy Catapult with an important measure of industry progress, the database provides the cell therapy community with an interrogatable resource for planning future trials. For example, knowledge of which UK hospitals have experience in cell therapies for particular therapeutic areas or in the use of a certain cell type can be important information in clinical trial planning.

### *UK Cell Therapy Clinical Trials Database - conclusions*

With the Cell Therapy Catapult's analysis of UK clinical trial activity starting in 2012 and the long timelines associated with studies, it is too early to draw many detailed and definitive conclusions about progress so far. However, with the number of ongoing trials in the database having increased from 24 in November 2012 to 41 now, it is fair to say that the UK cell therapy industry is healthy and growing, albeit relatively youthful with regard to late-stage development and commercialisation. The growing recognition of the potential of T cell immunotherapies for the treatment of cancers is also reflected in the database.

We hope that cell therapy researchers and organisations will find our UK Clinical Trials Database informative and useful. As the Cell Therapy Catapult and others focus on translational activities, we expect the analyses of future years to show an industry undergoing significant growth and moving towards maturation.

**April 2014**