PROJECTS PROPOSAL TO THE TRUSTEES OF THE SIR IAN BOTHAM FOUNDATION

THE FIRST 28 YEARS

There has been unimaginable success in improvements in treatments and survival for children with the most common form of leukaemia since Sir Ian Botham began fundraising in 1985. Now 92% of children survive the most common form of leukaemia. There is still work to be done to ensure that every child survives and there is work to be done on reducing the toxicity and impact of treatments but could the same be achieved for adult patients with blood cancer where survival is currently just 55%?

CLINICAL TRIALS

Clinical trials test new drugs or combinations of drugs in patients.

This is really important because it's the only way to improve treatments for all patients in the future. But it is an area where for adults bureaucracy, red tape and inaction have stifled progress.

In fact fewer clinical trials are now being run in the UK as pharmaceutical companies choose to take these studies further afield into Europe and Asia, where they are easier to set up. Ironically the UK is at the forefront of blood cancer research and yet patients are missing out on access to new drugs and treatments in the UK.

1. TRIALS ACCELERATION PROGRAMME

In response to this Leukaemia & Lymphoma Research has established the Trials Acceleration Programme (TAP).The pilot phase of TAP has been set up over the last 18 months ago to address a number of issues. Of primary concern is the fact that just 6% of adult blood cancer patients have access to clinical trials, compared with 19% of patients with other types of cancer.

TAP

From Leukaemia & Lymphoma Research

Research continues to yield promising new treatments, but it is often not possible to test these in clinical trials and potentially life-saving drugs are left to sit on the shelf. Clinical trials in the UK, particularly in blood cancer, are difficult to set up and slow to deliver results. Currently it can take anything from four to 10 years to complete a trial and analyse the results .Reasons for this include lack of staff resources; the bureaucracy around getting new protocols off the ground; and the fact that blood cancers as individual diseases are relatively rare. It is difficult for a single hospital to recruit enough patients on to a particular trial that has very specific requirements, often meaning that some trials are never completed.

Early phase trials are the most difficult to set up, but are the most vital for getting new drugs to patients. Before new drugs can be licensed and new treatment protocols are accepted they need to go through a series of phased clinical trials.

Early phase trials (I and II) are underrepresented for blood cancer patients in the UK and this is causing a bottleneck that prevents new treatments getting to blood cancer patients, when they most need them. Phase I trials test very new agents in a small group of patients for safety and dosage, and are very important for establishing whether new treatments are feasible. Phase II trials do not necessarily involve large numbers of patients but are used to confirm dosage and to identify any side effects.

In the pilot phase of TAP we have selected 13 centres[1] throughout the UK, coordinated by a central hub in Birmingham, which will enable us to set up more clinical trials in blood cancer, more quickly than ever before. The central hub has an expert team skilled at setting up clinical trials so that we can cut through bureaucracy and make sure that new trials open at each of the 13 treatment centres, simultaneously. This means that blood cancer patients will have access to trials, wherever they live in the UK. Running trials at all the 13 centres also increases the catchment area- which results in more effective recruitment and quicker results. Our initial investment was £2.3 million to set up the pilot phase for 2 years.

TAP ACHIEVEMENTS SO FAR

As with all innovative paradigm challenging initiatives, the establishment of the TAP programme has not been without its teething problems. However, it is important to recognise that much impressive progress has been made.

When first championed there was considerable scepticism in the research community surrounding the value or need for TAP. Within a year of its inception this scepticism was completely removed and there is now broad appreciation of the unique opportunity that TAP provides for not only the blood cancer research community but for the NHS and the Department of Health.

The innovation displayed by TAP was spotlighted by being featured in the governments 'Strategy for UK Life Sciences; One Year On' report in 2012 reporting that Novartis noted a 50% shortening in trial set up times and considerably reduced cost, indicating how TAP not only accelerates access for UK Blood Cancer patients to new treatments but also makes the UK an attractive location for Pharmaceuticals to conduct its business.In addition other research organisations operating within similar sectors are showing interest in joining and supporting the TAP framework.

At present TAP has 11 approved studies-11 trials that simply would not be available to patients without TAP.

THE PHARMACEUTICAL PERSPECTIVE

[1] Southampton General Hospital, Barts Hospital London, The Christie Manchester, King's College London (King's Guy's, St Thomas'), St James' University Hospital Leeds, Queen Elizabeth Hospital Birmingham, Hammersmith Hospital London, Belfast City Hospital, Gartnavel General Hospital Glasgow, Royal Liverpool University Hospital, Churchill Hospital Oxford, Cardiff University Hospital, Nottingham University Hospital

As one of the first pharmaceutical companies who invested in a trial run through the TAP Programme, Novartis have put on record on a number of occasions and in different contexts the positive impact that this initiative has had on three key factors that influence their trial placement decisions:

- Set-up time
- Speed of patient recruitment
- Cost

Novartis believes that the Programme has delivered on these three factors, most notably allowing the Oncology Business Unit to achieve first patient/first visit globally for the first time ever. Because of this success Novartis is keen to see the continuation of the TAP initiative and would welcome an extension of the concept behind TAP to other disease areas with a view to establishing it as standard practice. This obviously has resource implications. However, they believe that if the Government is serious about turning the NHS into a research asset and allowing more patients access to clinical trials, then the current problems with trial set-up times, speed of patient recruitment and cost need to be addressed. TAP has the potential of making a major contribution to tackling these barriers to trial placement.

WHAT NEXT FOR TAP?

It has become clear that an accurate appraisal of the value of TAP to include the number of trials opened, the number of patients recruited and the potential for clinical practice changing developments will require an extended pilot phase of a further 12 months. This will require at least an additional £800,000 of investment. We propose that all donations from the Foundation over the next 12-18 months support the TAP and the current UKALL childhood leukaemia trial, with a clear message to the UK of the importance of investment in clinical trials in the UK to save lives.

2. CHILDHOOD ALL

LLR is poised to improve both survival and quality of life over the next few years for children with leukaemia. We are currently investing £10 million on research in childhood leukaemia in the UK which aims to beat blood cancers on all fronts. From basic research to enhance our understanding of the biology through clinical trials to modify treatments and quality of life studies to make sure that we can monitor the impact of treatment in the longer team. To build on the Botham family involvement in childhood leukaemia over the last 28 years, and also to create a unified message with a move in to the adult cancers, we suggest support of UKALL 2011the definitive clinical trial for children.

This is a clinical trial that aims to see if changing the standard treatment for children and young people with ALL will reduce side effects and help stop

their disease from coming back. They aim to recruit 2640 patients by 2018 in 27 Centres throughout the UK.

The UKALL 2011 trial seeks to further refine treatment for children and young adults suffering from acute lymphoblastic leukaemia, which is the commonest cancer of childhood, and the rarer condition, lymphoblastic lymphoma.

The aim is to improve survival whilst reducing the burden of therapy for patients, carers and the NHS. Although over 90% of patients with these diagnoses can be cured, there are considerable short term and long term side effects associated with the treatment.

The UKALL 2011 trial will build on the current best available treatment and will assess whether changes in the way some of the standard anti-leukaemia drugs are given can reduce the side effects associated with treatment.

.