Impact of cytomegalovirus infection on outcomes of allogeneic haematopoietic cell transplantation

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Despite pre-emptive therapy, cytomegalovirus infection significantly impacts outcomes and resource utilization in allogeneic haematopoietic cell transplantation recipients, particularly among those with recurrent episodes of cytomegalovirus infection.

In a retrospective analysis of data from 172 allogeneic haematopoietic cell transplantation recipients, 57% of patients who suffered a first cytomegalovirus infection had ≥2 recurrent episodes, and 20% had ≥4 recurrences. The study was presented by Professor Rafael F Duarte, from the Department of Haematology, Hospital Universitario Puerta de Hierro, Madrid, Spain, at the 44th Annual Meeting of the European Society for Blood and Marrow Transplantation in Lisbon, Portugal.

Professor Rafael F Duarte, Department of Haematology, Hospital Universitario Puerta de Hierro, Madrid, Spain

In the first year post-haematopoietic cell transplantation, hospital length of stay was >30 days longer in patients with cytomegalovirus infection than in those without; this increase was >40 additional days in patients with ≥2 recurrent cytomegalovirus infections, significantly longer than those with only one episode of cytomegalovirus infection (19 days; $P<0.001$).

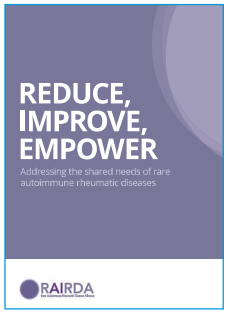
'Given their impact on outcomes and length of stay in haematopoietic cell transplantation recipients, recurrent cytomegalovirus infections may require sustained prophylaxs, although no clinical trial or large registry study has evaluated this strategy in patients experiencing two or more episodes,' said Professor Duarte.

In January, the European Medicines Agency approved the antiviral letermovir to prevent cytomegalovirus from becoming active and causing disease in adults receiving an allogeneic haematopoietic stem cell transplant. Many people have cytomegalovirus in their body but it is usually inactive and it does not cause harm unless the immune system is weakened.

Half of patients with rare autoimmune rheumatic diseases face 3-year wait for diagnosis

People living with rare autoimmune rheumatic diseases are facing major obstacles to diagnosis, treatment and lifestyle.

A new report, *Reduce, Improve, Empower*, published by the Rare Autoimmune Rheumatic Diseases Alliance (www.rheumatology.org.uk/Portals/0/Policy/Policy%20Report/RAIRDA%20Report_Web.pdf?ver=2018-02-27-132208-213), reflects the experiences of more than 2000 people across the UK who are living with lupus, scleroderma or vasculitis. It found that almost half of those people had to wait more than 3 years between experiencing the first symptom of their condition and being correctly diagnosed, and they have continued to face ongoing struggles since.



Two-thirds of people living with one of these conditions reported needing to visit multiple hospitals in order to get the treatment and care they need. The impact of these rare conditions can be significant – one in five people reported missing more than 3 months of work in the past year as a result of their condition, with a similar proportion having to give up work entirely.

Commenting on the results, Dr Peter Lanyon, chair of the Rare Autoimmune Rheumatic Diseases Alliance, said: 'These findings are a stark reminder of the challenges that people living with these conditions face, from getting a diagnosis, to accessing treatment and to coping with the impacts on home, work and family life.'

Discovery of new genes associated with osteoarthritis may pave the way for targetted therapies

To understand more about the genetic basis of osteoarthritis, 16.5 million DNA variations from the UK Biobank resource were studied (https://doi.org/10.1038/s41588-018-0079-y). Following combined analysis in up to 30 727 people with osteoarthritis and nearly 300 000 people without osteoarthritis in total, scientists discovered nine new genes that were associated with osteoarthritis, a significant breakthrough for this disease.

Using topological data analysis to define asthma subtypes

Researchers have identified biological variations in lung tissue samples that for the first time can help identify people with mild asthma from those with moderate or severe asthma using topological data analysis (https://doi.org/10.1016/j.jaci.2017.12.982).

Ontruzant is first breast cancer biosimilar launched in the UK

Ontruzant (trastuzumab), a biosimilar referencing Herceptin (trastuzumab), has been launched for the treatment of early breast cancer, metastatic breast cancer and metastatic gastric cancer. This is the first trastuzumab biosimilar to receive regulatory approval in Europe and is the first to launch in the UK.