**Meeting report**

**UK BMT Pharmacist Forum, Birmingham 10th November 2017**

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The second meeting of the UK BMT Pharmacist Forum took place in Birmingham on Friday 10th November 2017. Approximately 14 pharmacists from a cross section of UK transplant centres attended. Sponsorship was very kindly provided by Jazz Pharmaceuticals. The following sessions took place……………

**BOPA Update**

Nadjoua Maouche. Lead Pharmacist for Adult Haematology,,Oxford University Hospitals NHS Foundation Trust

Nadjoua Maouche provided an excellent overview of key highlights of the recent BOPA meeting in Glasgow. Some important take home messages are summarised below:

Biosimilar session – switch to biosimilar rituximab is delivering savings to NHS England in the region of £3,000,000/month! Some debate still as to whether rapid infusion schedules are OK for biosimilar – Calum Polwart is trying to develop a national data collection tool to encourage collaborative working in terms of collecting audit data. Interestingly, most attendees at the forum are following the 90 minute rapid-infusion schedule.

CAR-T cells - Kymriah (anti-CD19) has now received FDA approval for ALL but at a cost in the region of $475,000. There are currently 164 trials of CAR-T therapy open worldwide, with 6 in the UK. Cytokine release syndrome appears to be a very serious toxicity but can potentially be managed with tociluzumab.

In terms of notable abstracts, there were 2 posters (Moorhouse et al and O’Donohgue et al) focusing on developing toxicity management algorithms for novel immunotherapy such as checkpoint inhibitors. On a similar topic, Stoner et al described a home delivery model for pembrolizumab that achieved very positive patient satisfaction scores. And Preston et al performed a post-hoc analysis of the Hodgkin lymphoma RATHL trial data to investigate the impact of obesity on toxicity and outcome. The main finding was that dose reductions for obesity resulted in a trend towards a poorer PET scan response although there was no significant difference in PFS/OS.

*All abstracts were published in the Journal of Oncology Pharmacy Practice 2017; 23: 8: Dec (supplement)*

**ECP**

Dr Ram Malladi. Consultant Haematologist, Queen Elizabeth Hospital, Birmingham.

Dr Malladi provided a very comprehensive overview of GVHD management, including a discussion of the role of ECP in the setting of both acute and chronic GVHD, indications for which it was recently been approved by NHS England.

He initially discussed definitions of GVHD and explained that the traditional classification of acute (<day 100) and chronic (>day 100) were no longer being used with various cross-over and composite forms of GVHD now being recognised e.g. late acute. He discussed management of cGVHD in particular and emphasised the importance of emollients and topical steroids in the setting of skin cGVHD and the role of steroid mouthwashes (need to be held in the mouth for 2 minutes to be effective) for oral cGVHD.

The AZTEC trial of SC azacitidine was mentioned as a current clinical trial for patients with steroid refractory GVHD. Patients receive the drug at a dose of 36mg/m2 for up to 6 cycles.

Dr Malladi then discussed ECP which can produce responses in up to 80% of patients with cGVHD and usually involves fortnightly treatment (on 2 consecutive days) for 14 weeks then monthly treatments for 12-18 months.

In terms of novel therapies for steroid-refractory GVHD, there appears to be most interest currently in ruxolitinib and ibrutinib.

**Antifungals in HSCT**

Dr. Samir Agrawal. Senior Lecturer and Honorary Consultant, Barts Health

NHS Trust; and Blizard Institute, Queen Mary University of London.

Dr Agarwal delivered an excellent overview of current challenges in the management of IFIs in haematology patients, with a particular focus on antifungal stewardship. Areas discussed included risk factors for IFIs, the role of TDM, diagnostic challenges and dealing with spiralling expenditure, particularly in the area of prophylaxis. As an example he quoted a poster that had been presented at the Trends in Medical Mycology (TIMM) conference (Dexter, Agrawal, 2015) demonstrating that 85% of antifungal expenditure is in patients who don’t actually have an IFI! He also mentioned that NHS England are likely to be launching a fungal CQUIN at some point with a focus on generic antifungals, TDM, diagnostics and stewardship programmes. He is hoping to collect and collate audit data from a number of large UK centres and seemed very keen to engage with us as a group in terms of supporting this initiative. He also encouraged the audience to try and attend the next fungal update meetings ([www.fungalupdate.org](http://www.fungalupdate.org)) that is taking place in London on 2nd-3rd March 2018.

Some of the references he quoted are listed below:

[**http://www.haematologica.org/content/102/3/433**](http://www.haematologica.org/content/102/3/433)

[**https://www.ncbi.nlm.nih.gov/pubmed/21177403**](https://www.ncbi.nlm.nih.gov/pubmed/21177403)

[**https://www.ncbi.nlm.nih.gov/pubmed/22324737**](https://www.ncbi.nlm.nih.gov/pubmed/22324737)

[**http://www.nature.com/articles/bmt2010256**](http://www.nature.com/articles/bmt2010256)

**G-CSF Survey**

Nick Duncan. BMT Pharmacist, QE, Birmingham

Nick Duncan presented the results of a recent survey of UK haematology practice in the area of G-CSF prescribing. The survey contained questions covering choice of G-CSF for stem cell mobilisation, post-transplant count recovery and 1ry or 2ry prophylaxis in patients receiving conventional chemotherapy. There were also questions relating to starting and stopping criteria for G-CSF in the post-transplant setting. Responses were received from 25 UK centres. Eighteen centres treated adult patients only, three were paediatric centres and four treated both adults and children.

Data relating to the choice of G-CSF for stem cell mobilisation are presented in table 1:

Table 1 – Breakdown of G-CSF usage for stem cell mobilisation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Neupogen® used | Granocyte® used | Both Neupogen® and Granocyte® used | Biosimilar Filgrastim used |
| Pre-autograft | 0% | 40% | 4% | 56% |
| Pre-allograft | 12% | 60% | 16% | 12% |

In the post-transplant setting, 13 centres (52%) routinely used G-CSF for all patients and 2 centres (8%) did not give it to any patients. The remaining 10 centres used G-CSF in specific clinical circumstances. For example, five centres routinely used G-CSF in autograft recipients but not in allograft recipients. In those centres that used post-transplant G-CSF, the start date was most commonly 5-7 days after stem cell return but ranged from 1-14 days. The majority (77%) of respondents stopped G-CSF once the absolute neutrophil count (ANC) was >1x109/l for 1-3 days although the cut-off ranged from 0.5-3x109/l. 87% of centres used biosimilar G-CSF in this setting.

For 1ry or 2ry prophylaxis in patients receiving conventional chemotherapy, all but one adult centre used biosimilar filgrastim for some or all of their patients. The 3 paediatric centres all used Granocyte® and 2 adult centres used pegfilgrastim in some patients.

Nick commented that he was aware of at least 2 centres (UHB and UCLH) that had recently changed to biosimilar G-CSF for stem cell mobilisation in the autograft setting and suggested that it might be worth repeating at least part of the survey next year to see if there has been a significant shift in favour of biosimilar G-CSF for mobilisation.

**The BMT Pharmacist Forum moving forward - What Happens Next?**

Eamon O’Brien. CR&C Organisation Limited, Executive Coaching and Facilitation

Eamon facilitated a discussion session involving all participants. The following slide (provided by Eamon) summarises the main outputs of the discussion.



In terms of what happens next:

* Nadjoua to contact Jenny Byrne (chair of BSBMT) to explore potential to work together
* Simon to engage in similar conversations with Pinkie Chambers from BOPA
* Nick to invite representative from POP group to next meeting to present on their experience with setting up their group
* Further discussion to take place at next Forum

*Report written by Nick Duncan, December 2017*