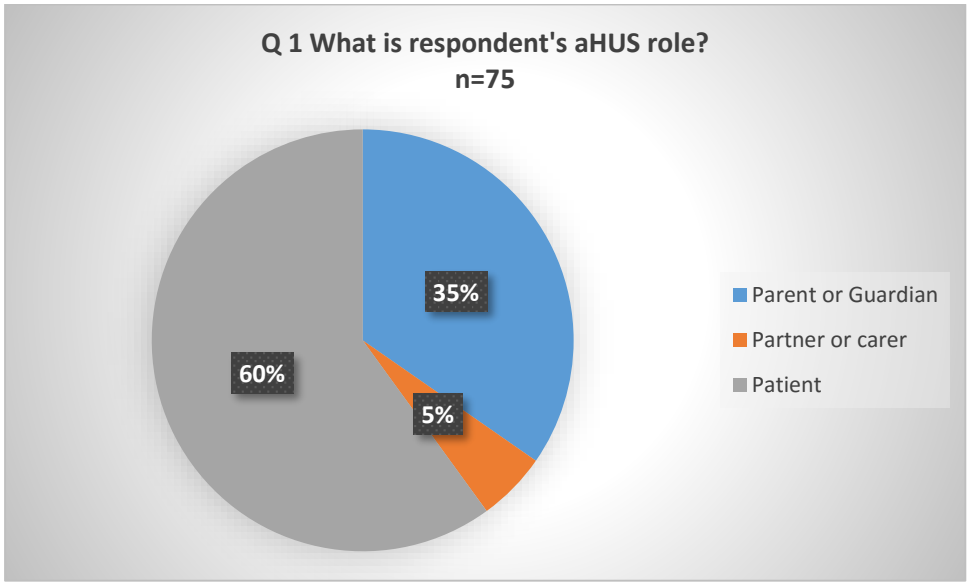
Global aHUS Survey 2016- European aHUS Patients Voice

The 2016 Global aHUS Survey launched on Rare Disease Day and closed 15 April. Participating were 233 aHUS patients and caregivers from 23 countries, (responding in 6 languages) each contributing a patient voice for aHUS.

Responses were received from, or about, 75 aHUS patients from 12 European Countries, of which 2 were not members of the EU. European patients therefore provided just under 33% of the Global Voice.

The following charts summarise the responses from the European participants, along with a short narrative commentary on the results from each question, including references to the equivalent Global results.

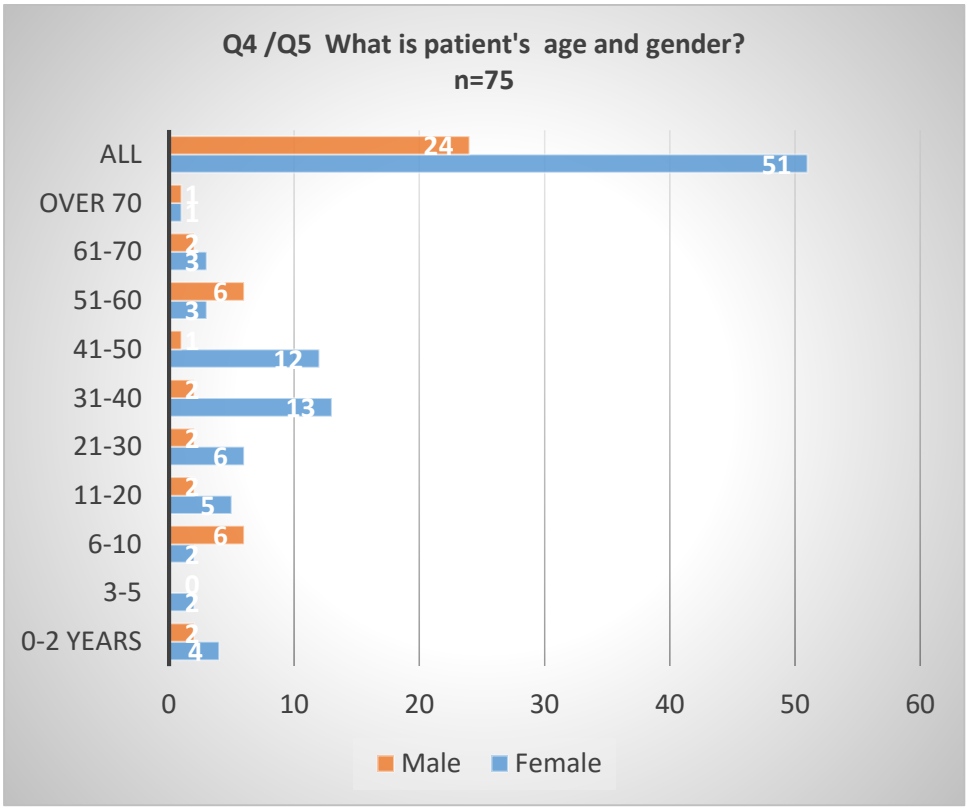
Section 1 – Respondents Characteristics



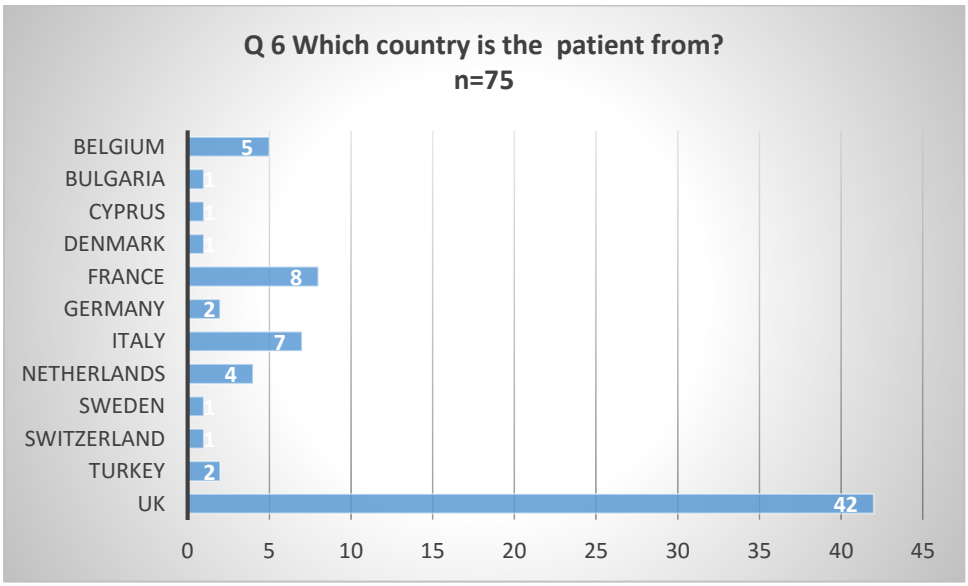
Three fifths of respondents were patients themselves, and the others were mostly parents or guardians of children with aHUS.

Note : Q2 & Q3 related to age and agenda of respondents and are not charted.

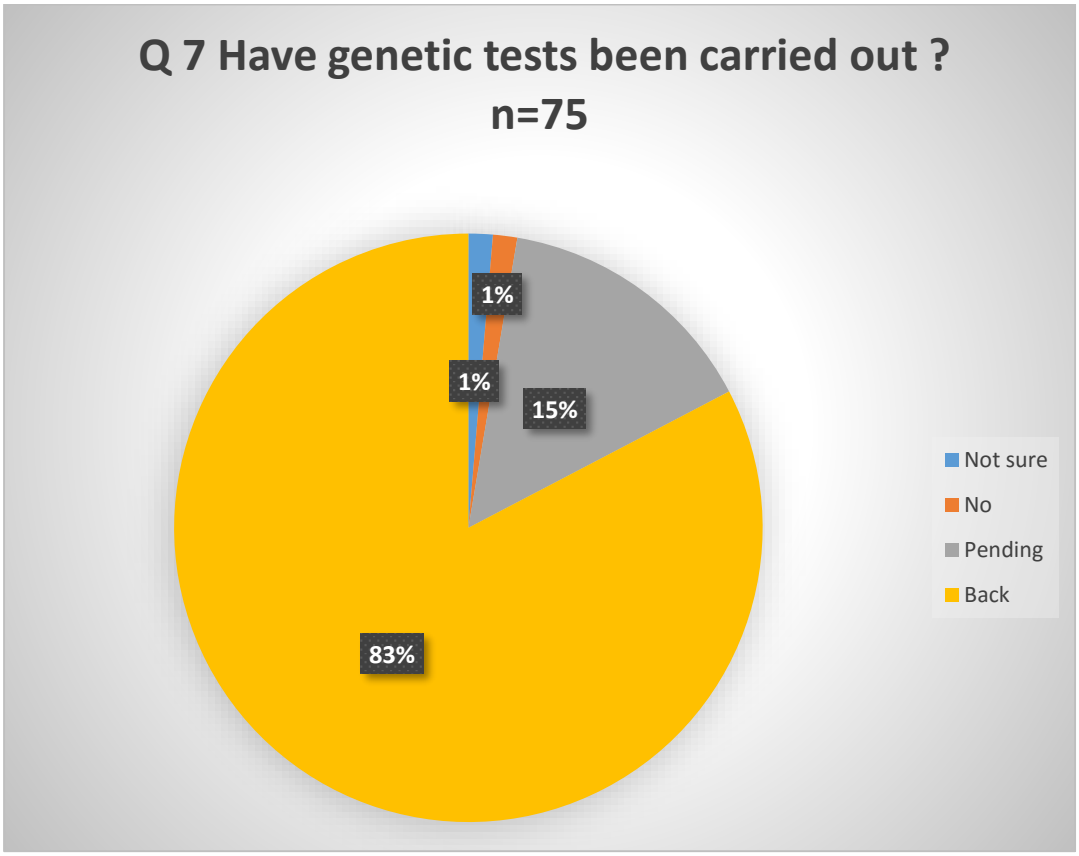
Section 2 Characteristics of Patient



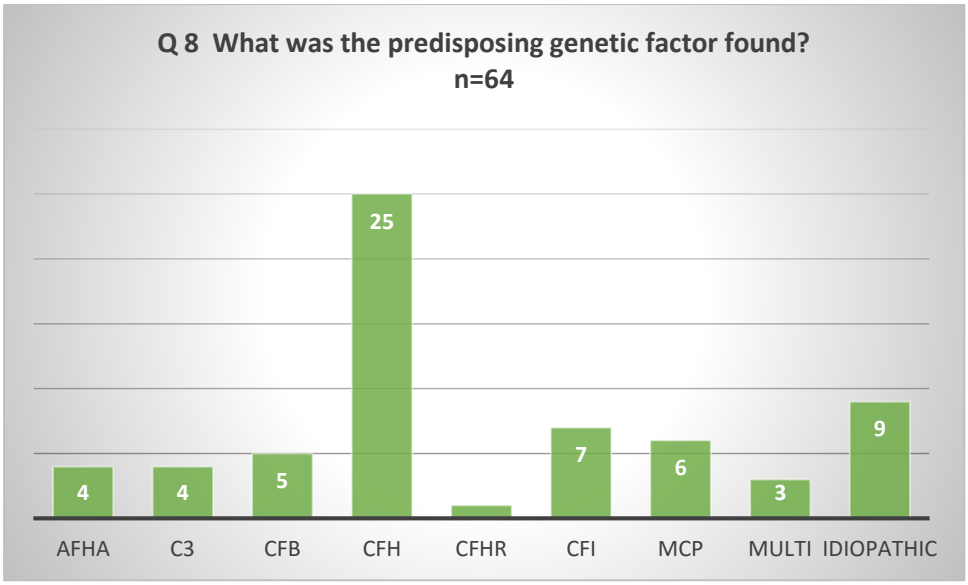
The split of patients' gender of almost 2 to 1 is not an untypical reflection of the overall aHUS patient population in Europe; but contrasts markedly from the near 50:50 split in the Global response. The spread of the patients' ages, with an almost equal number of males and females among young children, followed by young to middle age female aHUS cases dominating by far, until a much equal (although slightly more males) mix later on onsets, is fairly representative of the disease age occurrence during a life time. The impact of different biological changes and developments with age might appear to have some significant bearing.



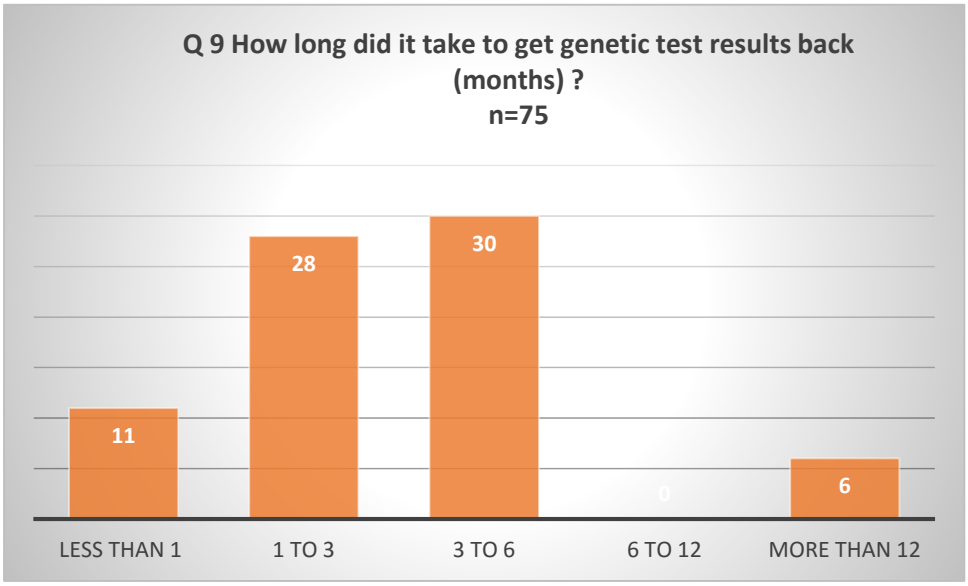
Of the 75 European respondents, only 3 were from countries outside the EU (Turkey and Switzerland). The dominant UK response perhaps reflects the strength of patient advocacy and communication pathways in that country, rather the relative aHUS patient population. Effective engagement is something for those rare disease groups in other countries to think about. However, although the European responses were just about a third of the Global total of 233, there were 12 Countries in Europe which participated, which is just over half of all countries engaged.



A substantial number of European patients have been genetically tested, only 2% had not, or were not sure. Access to genetic testing is more prevalent in Europe compared to the rest of the world where 11% of respondent replied that they had not been tested. Whilst not affecting the initial aHUS diagnosis, awareness of the patient specific predisposing factor helps with prognosis and on-going treatment management; and it would seem that Europe is, at present, better placed to manage that.



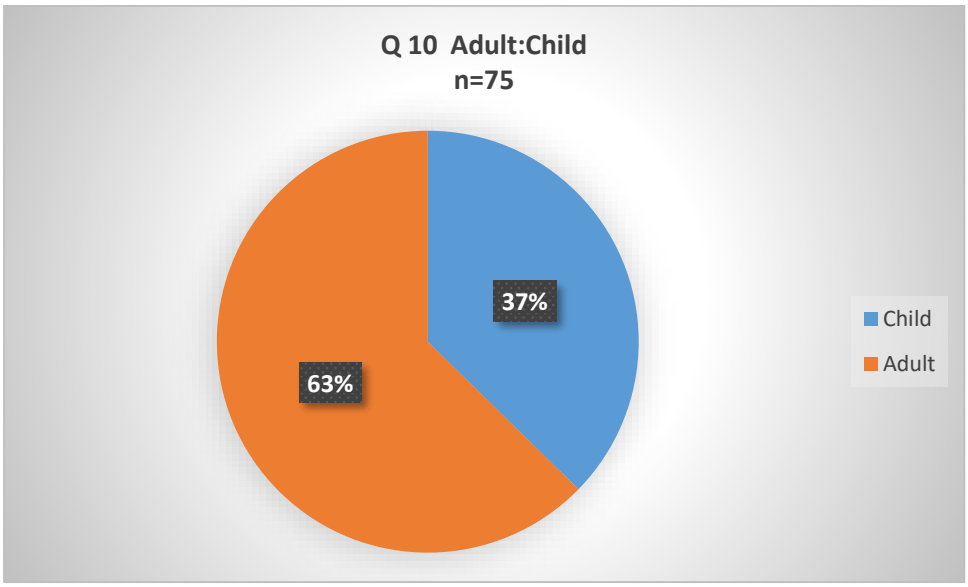
Of those knowing the results of their genetic test, by far the most, around 40%, had a predisposing factor in their Complement Factor H (CFH). The other most common predisposing factors were Complement Factor I (CFI) and the Membrane Coefficient Protein (MCP). These three factors combined account for more than 60% of European aHUS cases reported. The remainder were at levels to be expected apart from Idiopathic, i.e. where no known predisposing factor had only been found in 15% of respondents. This is much lower than would normally be expected, sometimes 40 to 50% of patients fall in to this category. In the Global figures, idiopathic and CFH responses were nearer to 25% respectively.



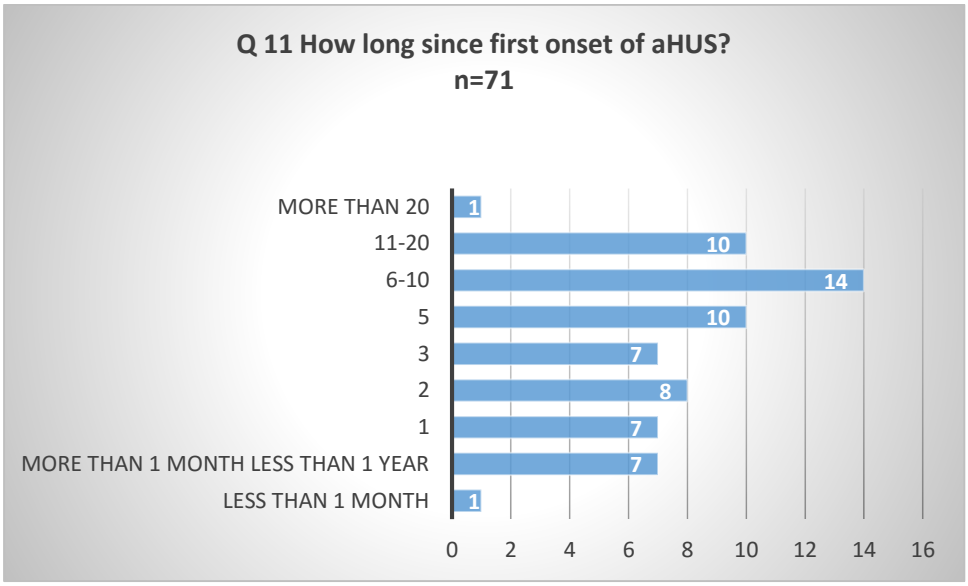
Most genetic test results were returned within 6 months with just over half overall returning in less than 3 months. A small number took more than 12 months. Although not knowing the existence of a predisposing factor to aHUS is not a barrier to earlier treatment, quicker awareness of just which factor is at play may inform prognosis and longer term individualised treatment and patient counselling. Overall Europe turnaround times for tests were quicker than experienced globally, just

over 90% within 6 months compared to 75% globally; however, more work is needed for the overall service to match the best achieved within one month.

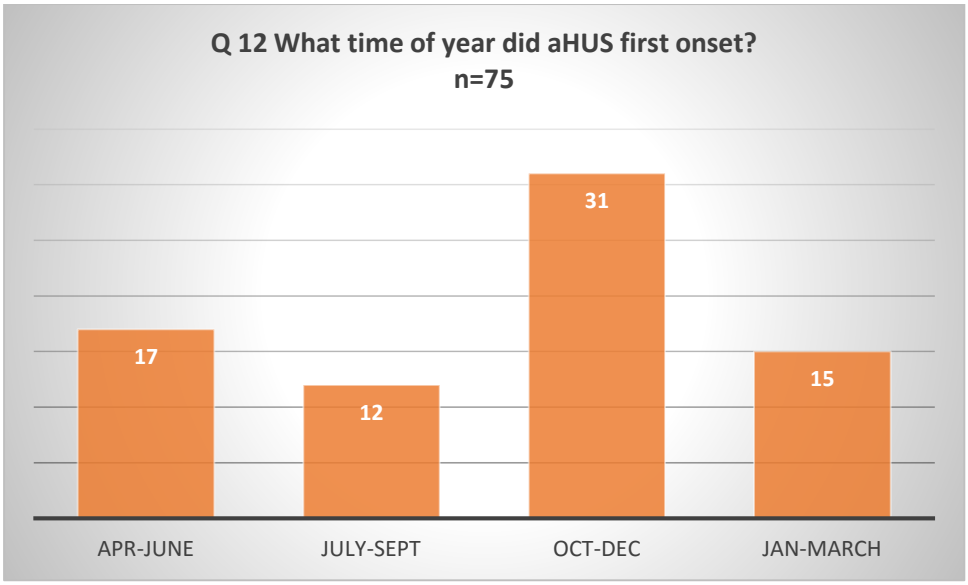
Section 3 Patient Profile



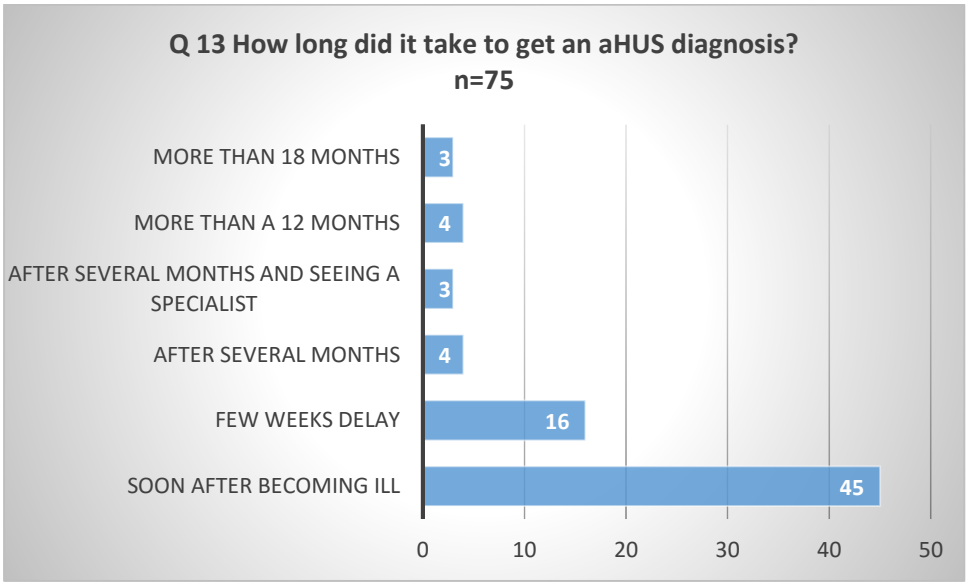
The mix of more or less 2 to 1, adults to children response differs only slightly from the Global mix of 60% adults 40% children.



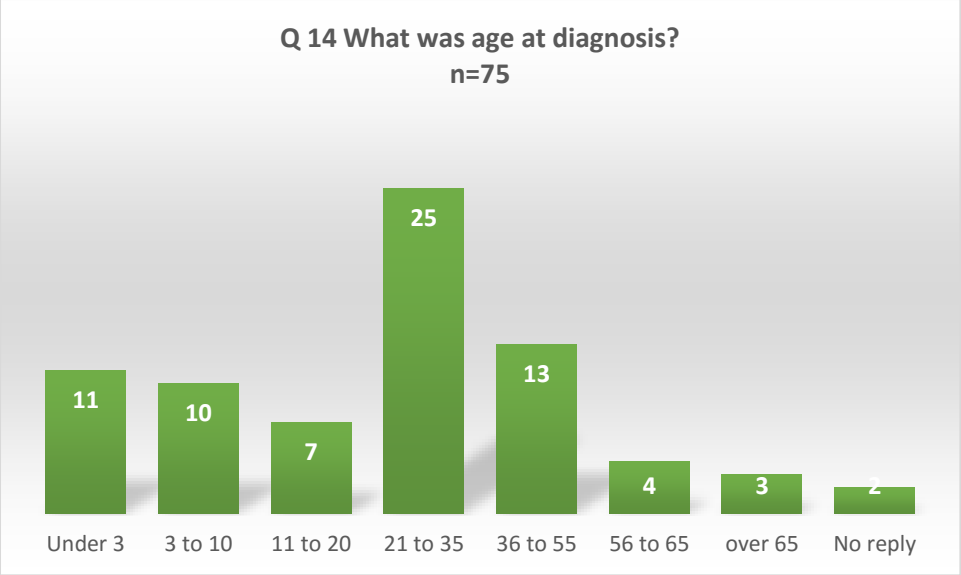
The most recent patient to onset was a child within the few weeks of the Survey taking place. The numbers onseting even out over the past 5 years as should be expected if incidence is consistent. A third of respondents reported living with disease for 6 years or more, with 1 respondent having more than 20 years' experience.



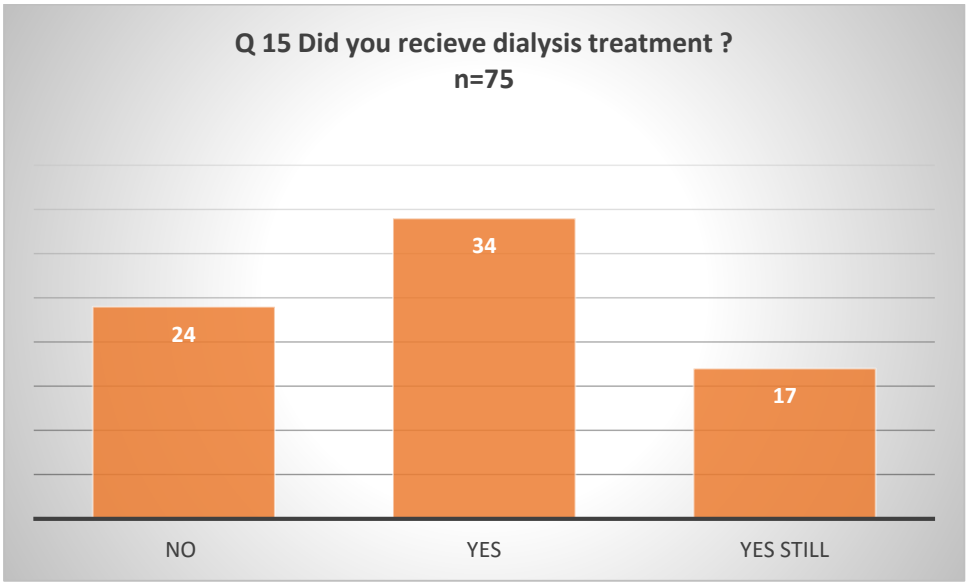
This question was included because of the surprising results coming from an aHUS social media discussion about month of onset The higher numbers in this survey again bear out a suspicion that aHUS patients are more likely to onset with the disease in winter months than summer; and the contrast is evident in the chart, as two and half times more European patients onset October to December than July to September. The implications for diagnosis and patient management may need more consideration.



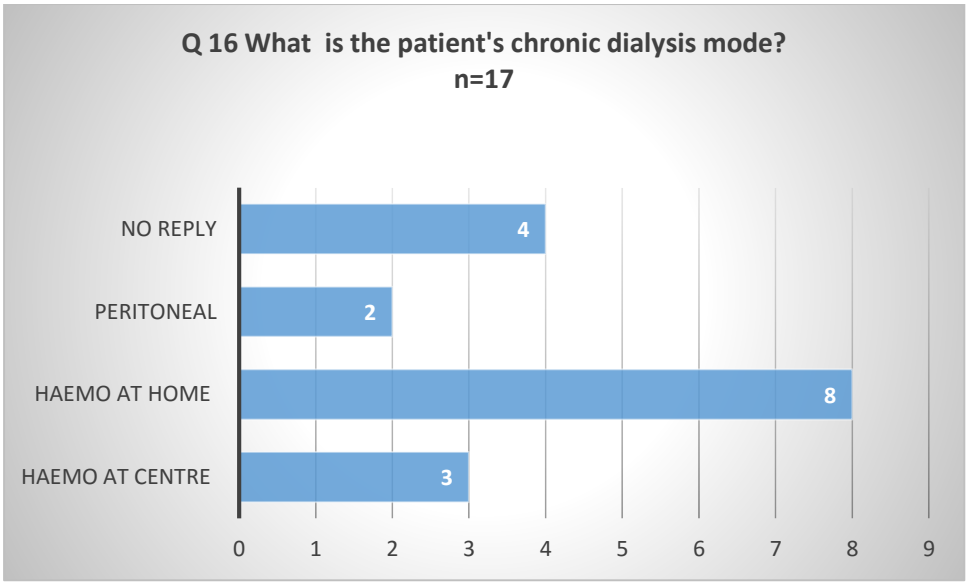
Compared to most rare diseases, patients with aHUS are identified very quickly. This is important for a disease which frequently onsets out of the blue, but which is immediately life threatening. The ability of clinicians to spot the acute kidney injury (AKI) and anaemia and clotting (TMA) and excluding the other causes of TMA to think aHUS is improving in Europe. Overall the Global and European time to diagnosis pattern was very similar reflecting a word wide relative success in this facet of aHUS as a rare disease.



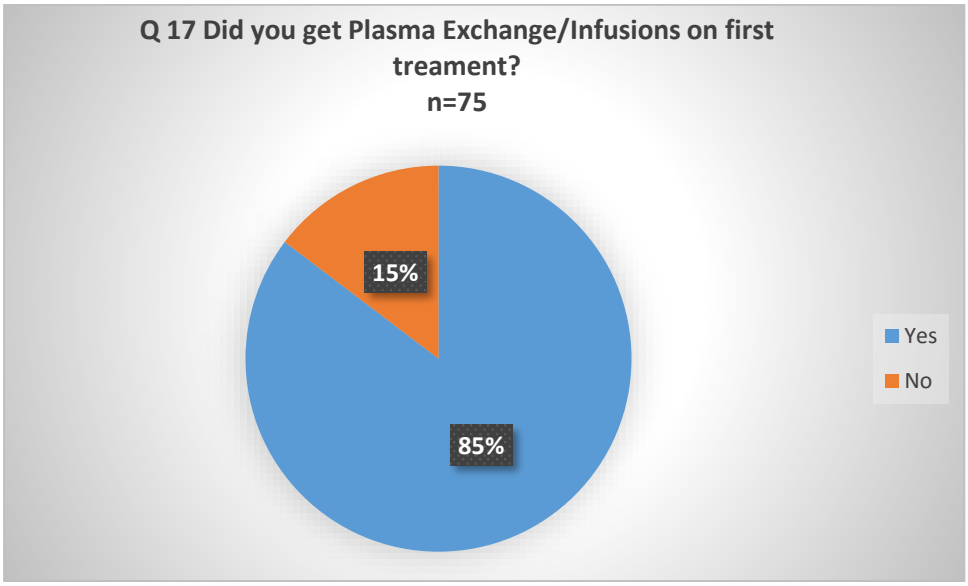
Over 66% of patients have a diagnosed onset before 35 years of age, making aHUS appear to be a disease of childhood and young (female) adulthood. Although it tapers off over subsequent years there are morelater onsets emerging; and an agenda for late adulthood patients may increasingly be needed.



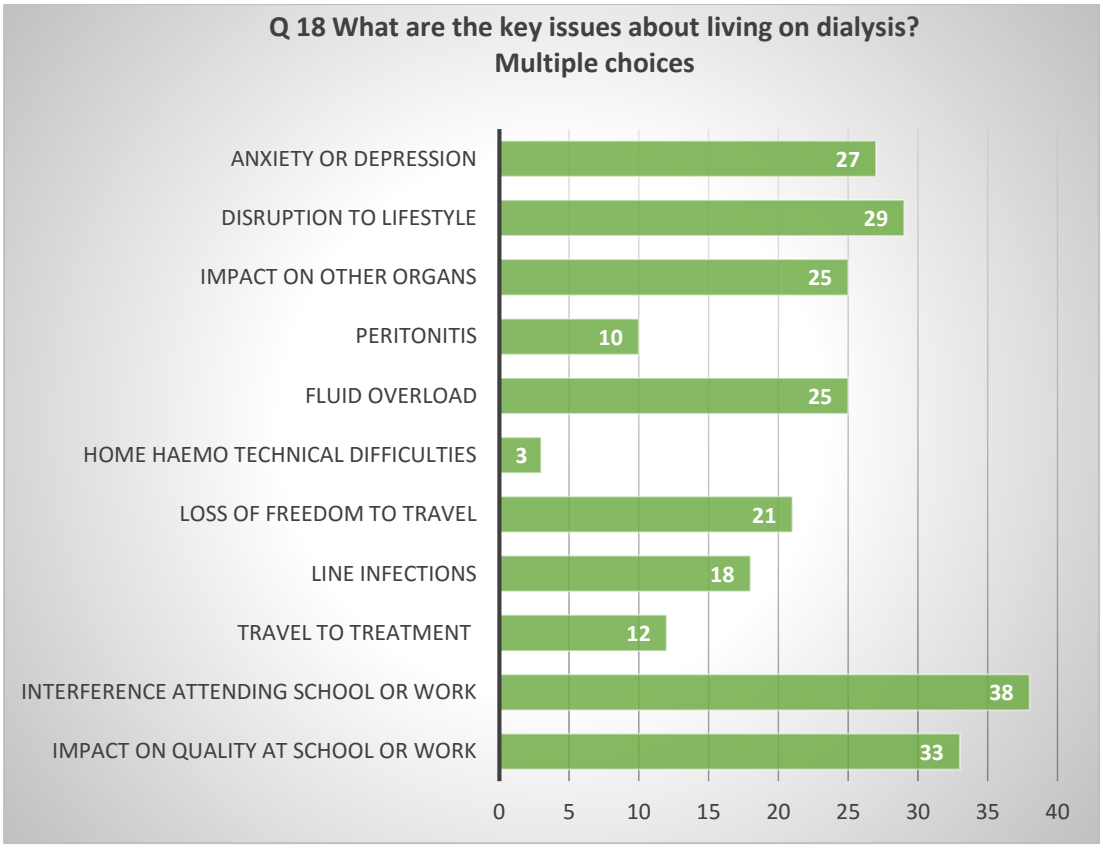
Two thirds of patients have experienced dialysis; and, nearly 20% of respondents are still doing so. Dialysis patients needing a transplant supported by a complement inhibitor are frequently the last to be included in the scope of access to Eculizumab, and even then may have a long wait for a suitable donor kidney.



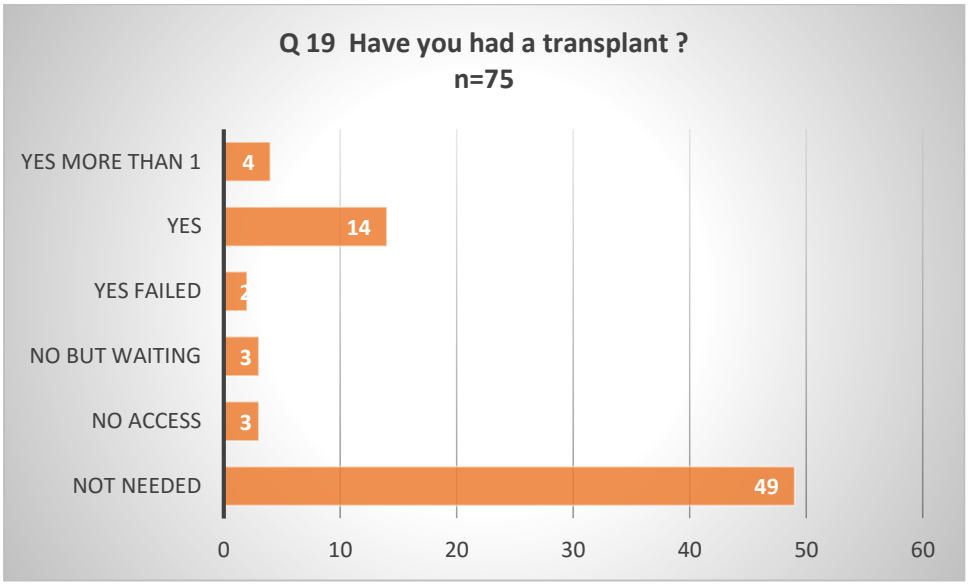
Nearly two thirds of European aHUS dialysis patients report that they perform their own haemodialysis at home, a much higher level than Globally, where peritoneal dialysis is more prevalent.



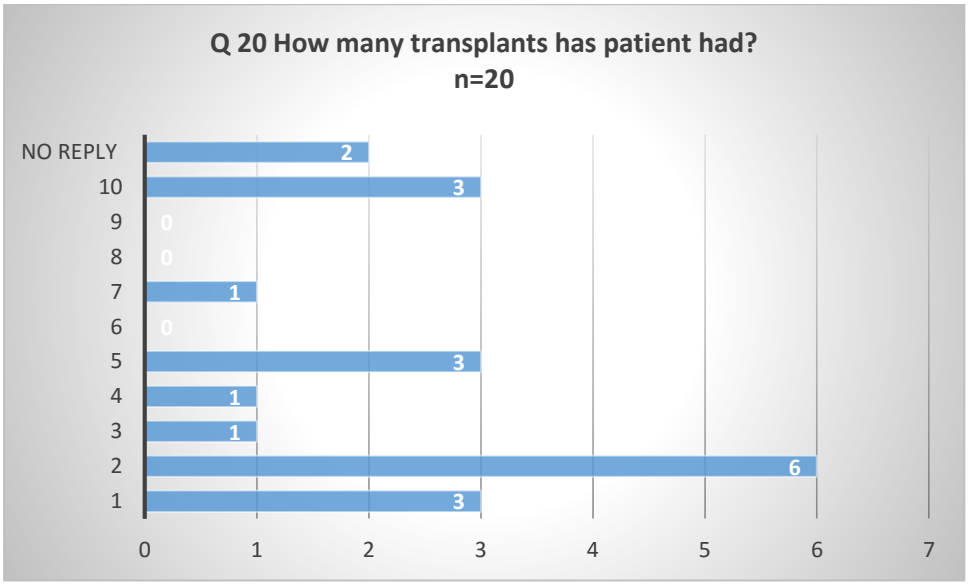
A much higher number of aHUS patients received plasma therapy in the acute phase of their encounter with aHUS. Given the lower numbers who experienced dialysis, plasma therapy followed by drug therapy, would appear to have maintained or improved kidney function to avoid the necessity for dialysis. The use of plasma therapy was slightly higher (87%) in the Global results.



Living with dialysis, whether for a short or long time, requires life adjustments and coping with the clinical impact of the treatment. The societal impact on a patient (and carers) work or school life both on attendance and the quality of work/studies, has been identified as being the biggest adverse consequence, followed by how patients no longer can live as they did and lose personal freedoms. Not surprisingly a feeling of anxiety and depression pervades, which itself needs to be treated alongside progressive physical damage to non-renal organs and life threatening infections caused by dialysis. Very few experience technical problems with home dialysis suggesting a personal efficacy develops. There were similar patterns of responses in the Global results.

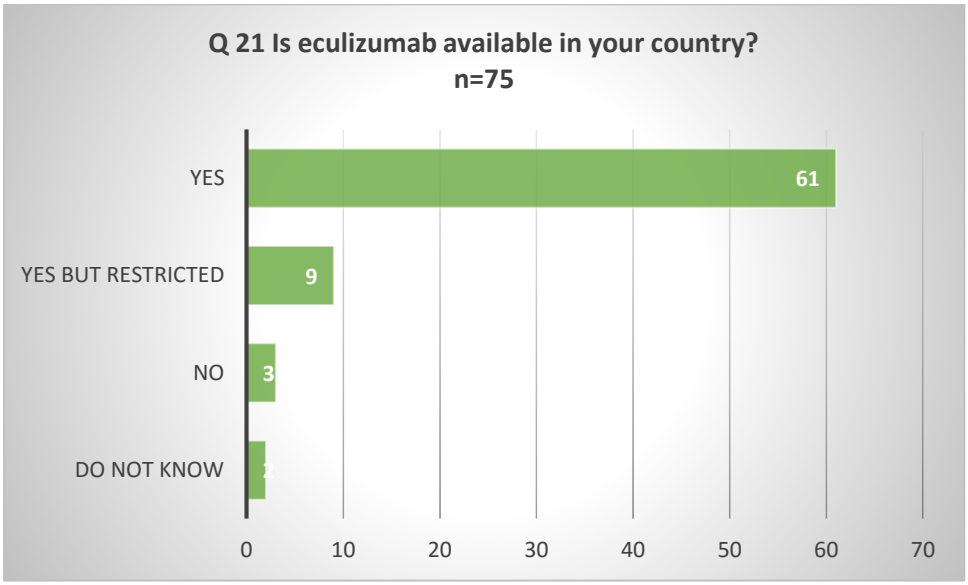


Two thirds of respondents have not needed a transplant, whilst just over a fifth have and it is working. A small number are still waiting, and a similar number say they cannot access a transplant. There were no combined liver/kidney transplants reported by European patients

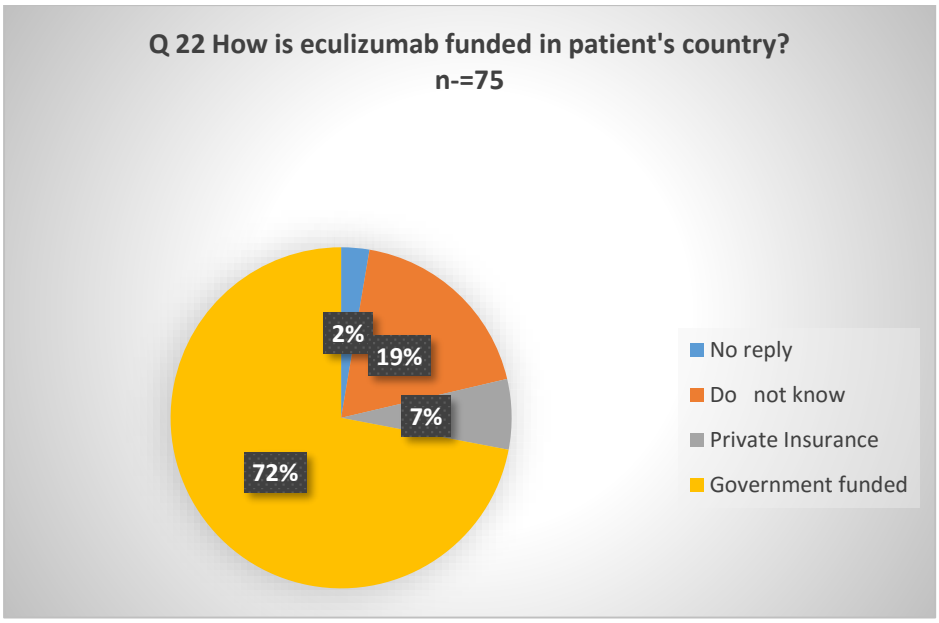


Most aHUS patients requiring a transplant have had more than one. The first may well have happened years previously when there was less understanding/availability of effective supportive therapy, or perhaps, the transplant occurred as a routine procedure in an undiagnosed patient, but aHUS unexpectedly manifested itself as a result. Three patients have experienced ten transplant operations.

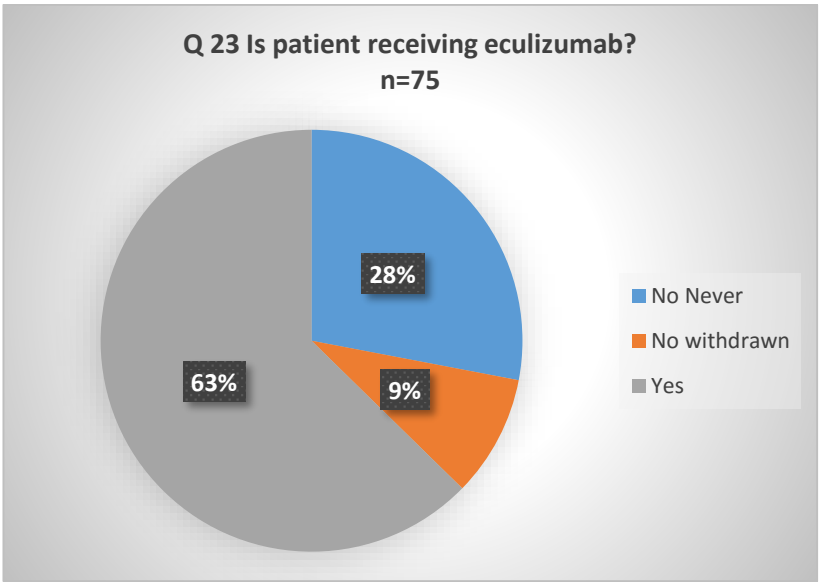
Section 4 Eculizumab Treatment



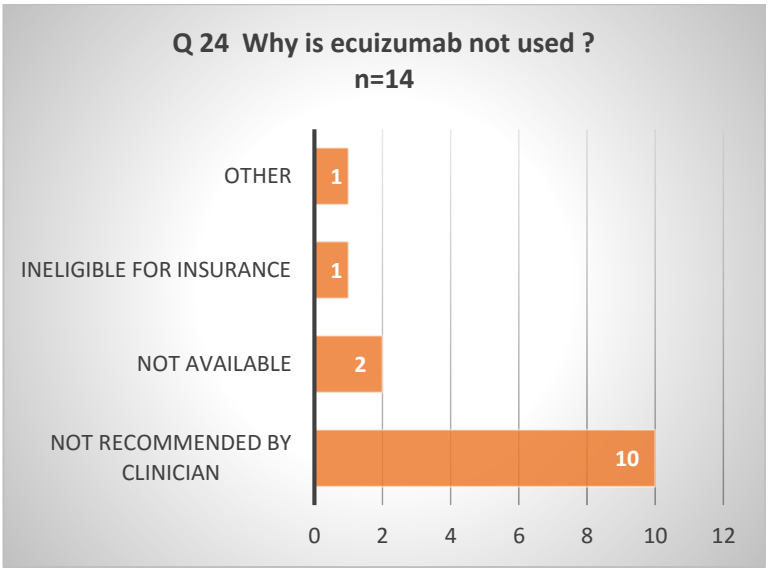
Nearly all European patients report that they have Eculizumab available in their country. This is a reflection not only the high level of care and treatment of patients, but an enlightened and equitable approach to those with rare diseases needing ultra-orphan drugs by European Health Authorities. Just a small number of aHUS patients remain to now get in scope.



Most European HealthCare provision is socially funded and nearly three quarters of respondents recognised that their Government paid for their treatment. Surprisingly, however, almost 20% of patients do not know how their drug would be funded.

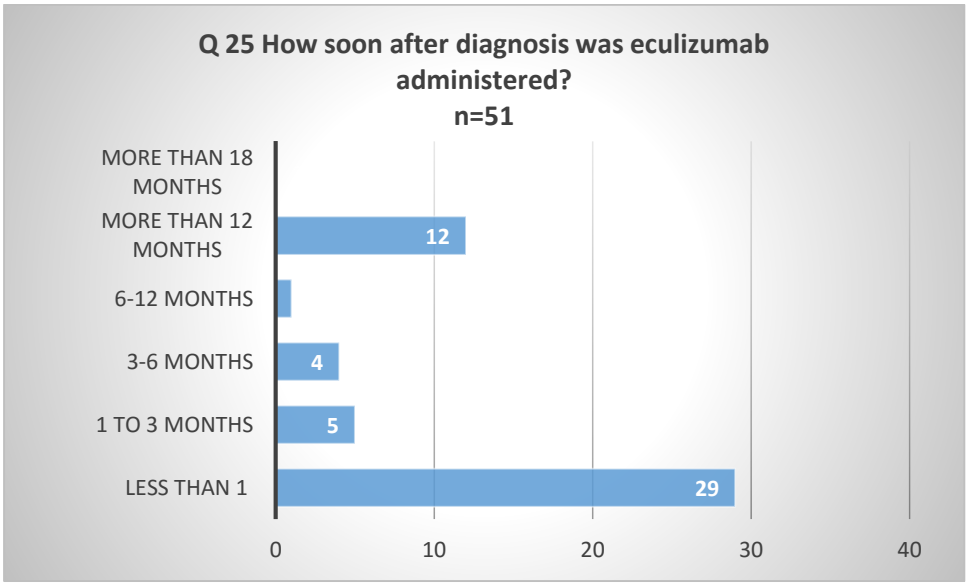


Nearly two thirds of patients are reiving Eculizumab treatment and nearly 1 in 10 has seen it withdrawn.

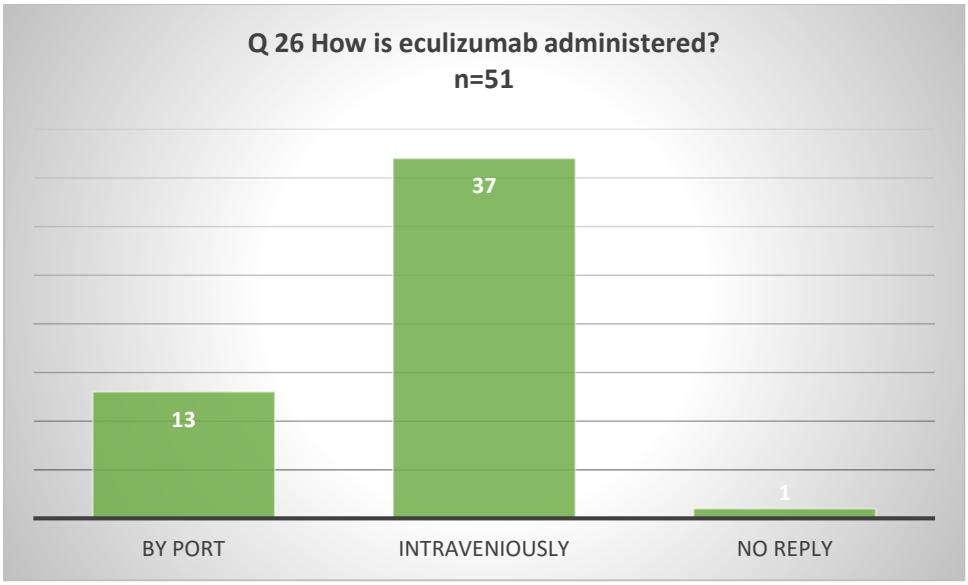


Of those responding about why Eculizumab was not used in their treatment, nearly 80% said it was not recommended by their clinician. This was more likely to happen in Europe than Globally.

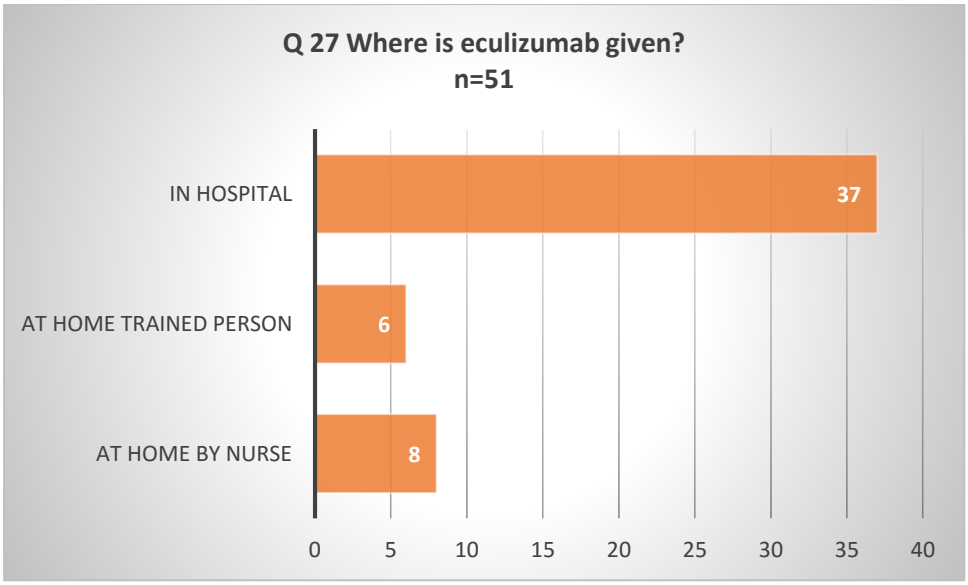
Note: Q 25,26,27,28 only answered by those on Eculizumab



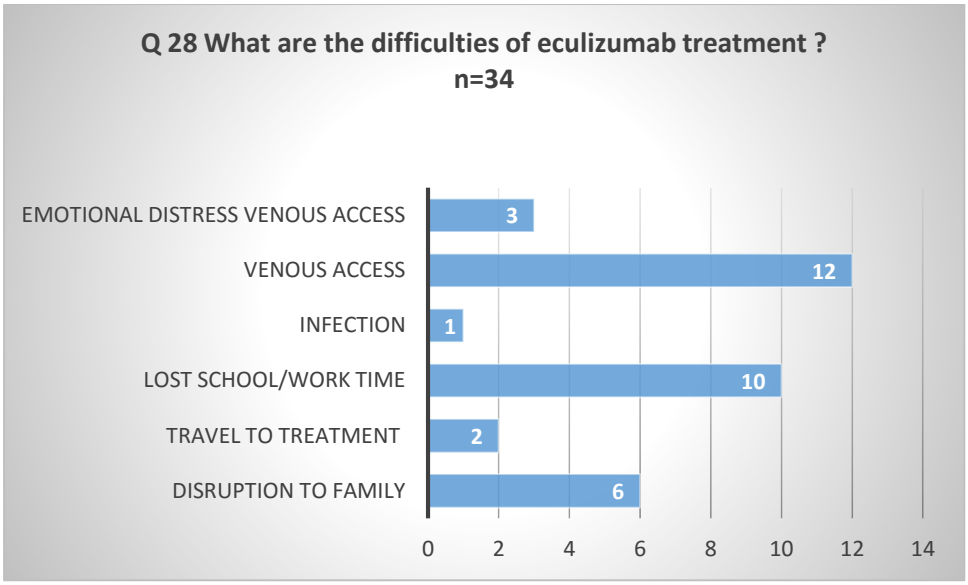
Just over 60% of respondents said they received Eculizumab within a month of diagnosis, and for nearly a quarter it took over 12 months.



Most (75%) Eculizumab recipients are infused intravenously, and remaining 25% have a port for the purpose. Globally more ports are used 42% and consequently less ,58%, is done intravenously.

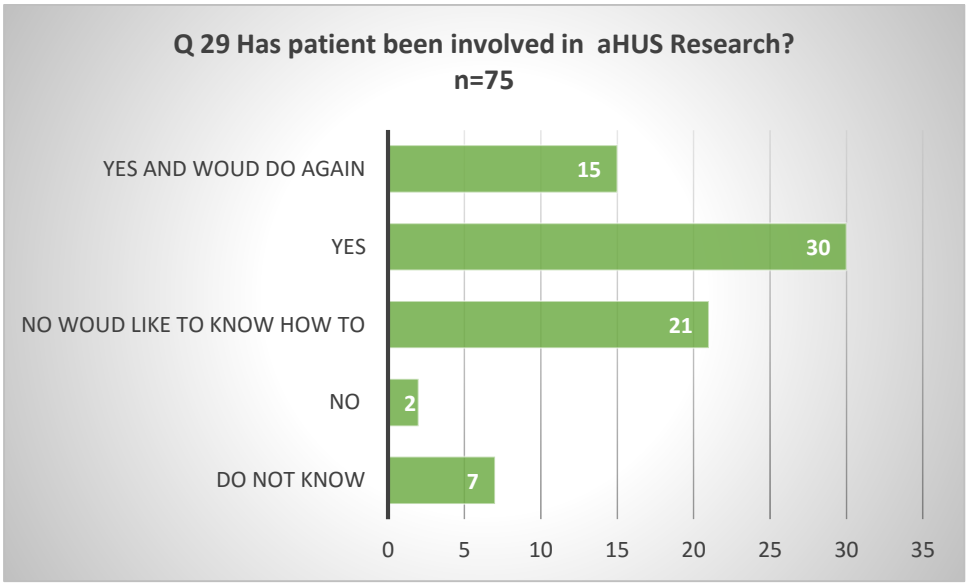


Again 75% of patients attend hospital to receive their Eculizumab and the remainder have a home service, with a low but higher than expected number (11%) of patients managing their own treatment. If done at home, more patients in the Global results were, or had persons, trained to carry out their own infusions.

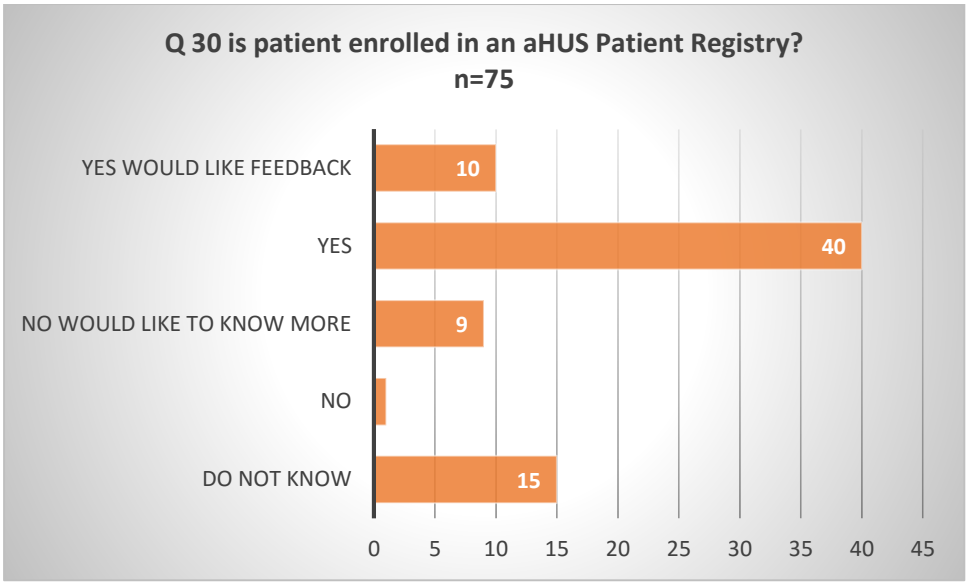


Of those reporting difficulties with Eculizumab treatment, difficulty of access to veins and some lost school and work time featured highly. Overall European patients reported less difficulties, particularly for lost school/work time than Global patients, but venous access was more frequently cited by European patients.

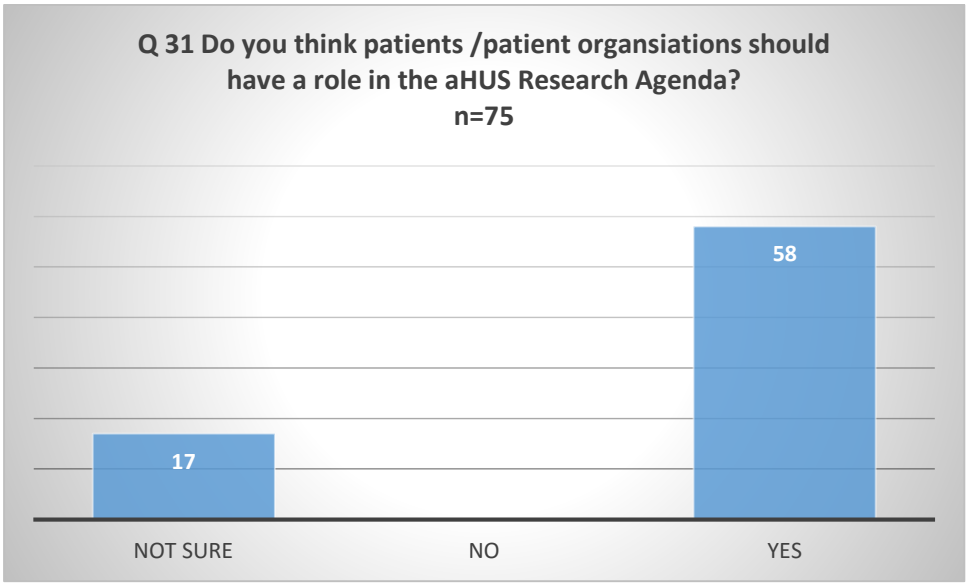
Section 5 Research and Registry Participation



60% of patients say they have participated in aHUS research and, over 25%, who have not, would like to know how to. More European patients have participated in research than was the result Globally where 50% have reported participation.

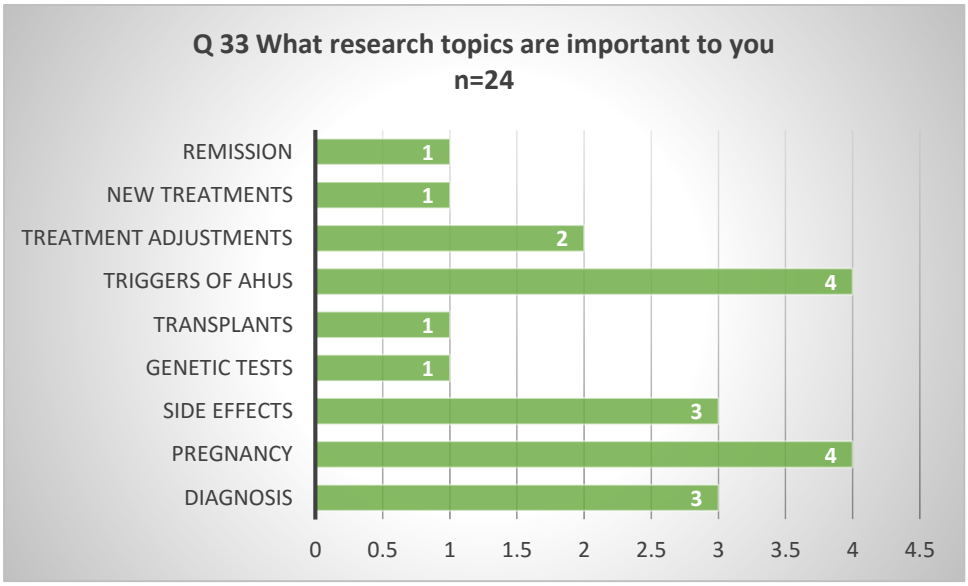


Two thirds of European patients are enrolled in a patient registry and about 15% who said they were not would like to know more about enrolment. A large number (20%) said they did not know whether they were enrolled or not. Work is needed to make this facet of rare disease management more inclusive and clear cut. Again the European registry participants were markedly higher than Global participants, of whom only just over half claimed to be enrolled in a Registry.

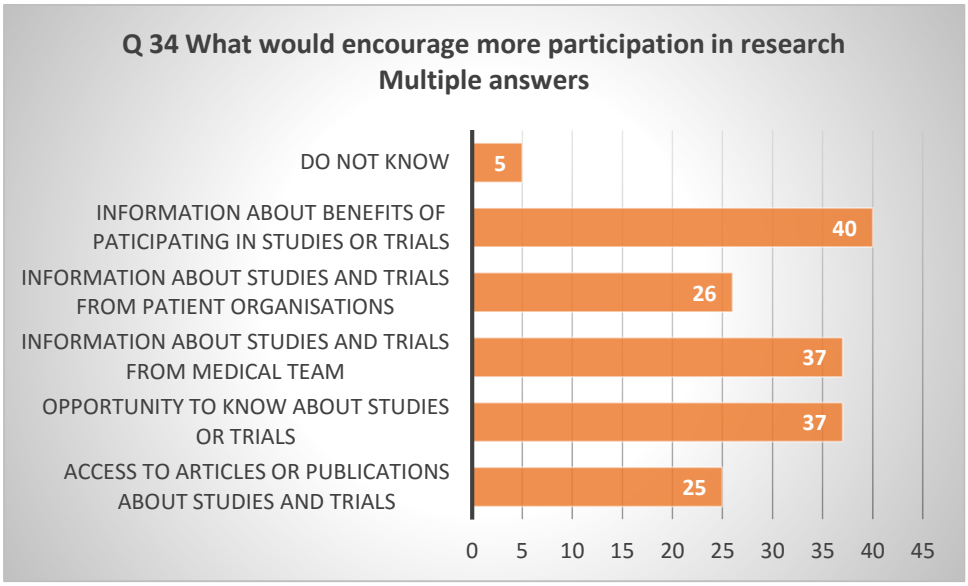


Almost 80% of respondents thought that patients or patient organisation should have a role in the aHUS Research Agenda and although some were uncertain, no one said “No”. A similar split occurred in the Global Results; so there a strong voice for more say in research.

Q 32 covered by Q 33

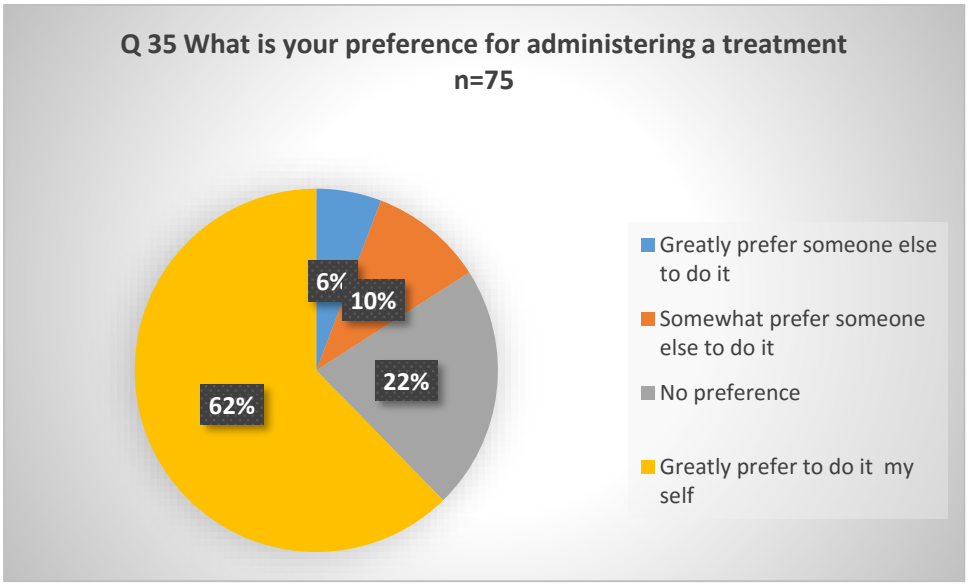


Pregnancy and other general triggers featured prominently in the research topics put forward by respondents. These were followed by more understanding of side effects of aHUS onset and treatment and how to improve diagnosis. Similar suggestions were made in the Global responses but Treatment Adjustments featured most prominently. Overall European patients offered relatively fewer topics for research than Global patients.

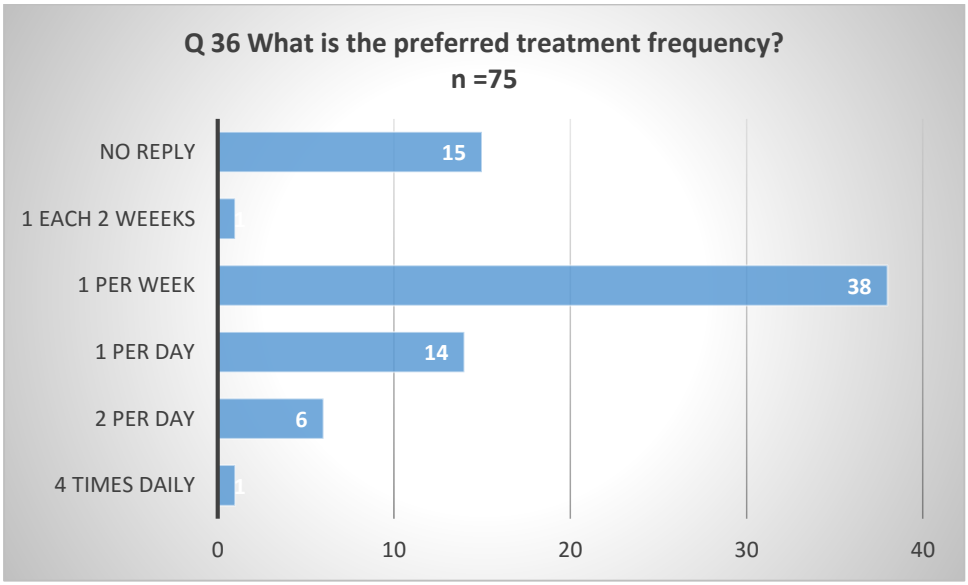


More information about benefits of trials and studies is needed to encourage participation, supported and supplied by the patient's medical team. Overall there was a similar response pattern in the Global results except European patients emphasised the "information about benefits" more.

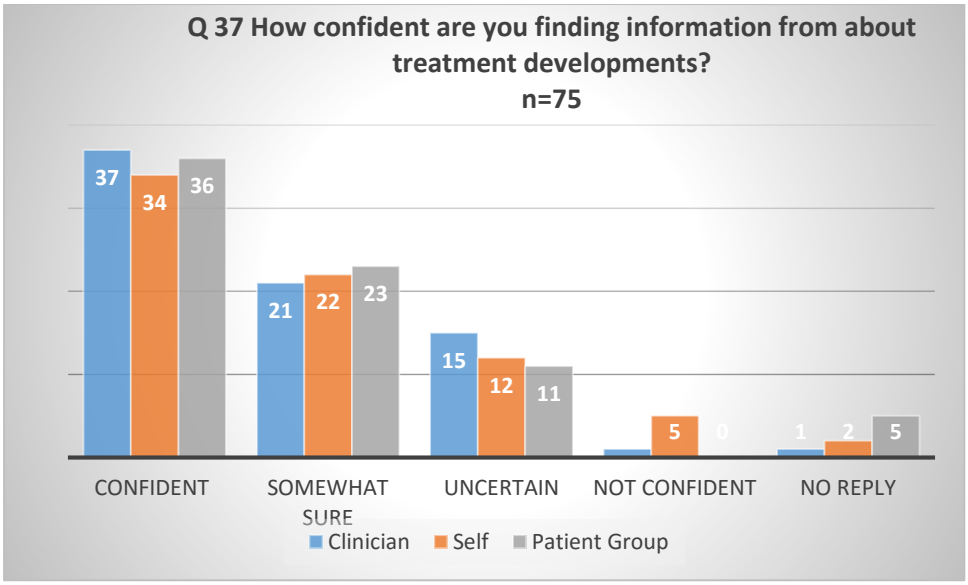
Section 6 Insights of patients and care givers on new treatments



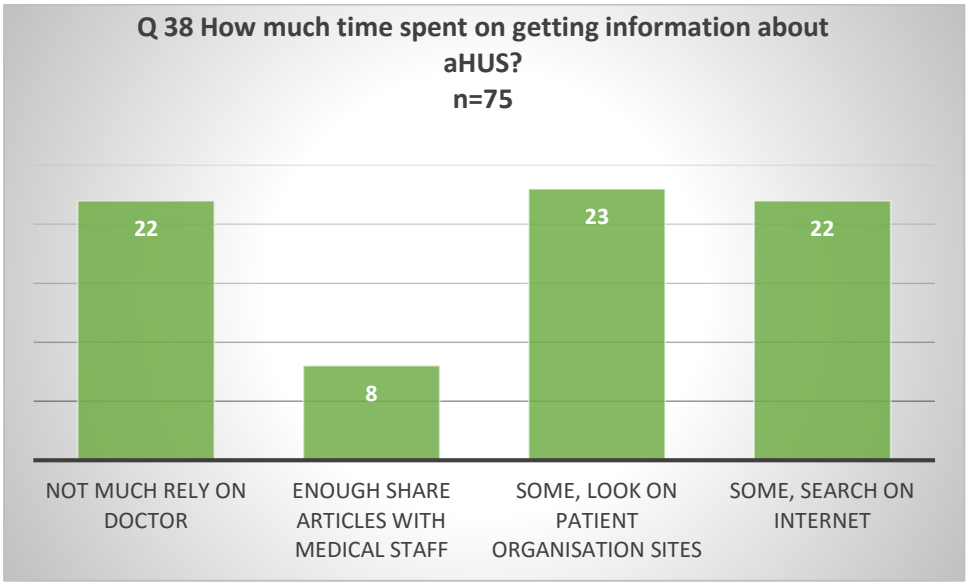
Nearly two thirds of patients preferred a treatment they could do themselve , but nearly one in six have a strong preference for others to do it for them. 22% have no preference. The Global results express less preference for “do it yourself”, and therefore more prefer for it to be done by someone else.



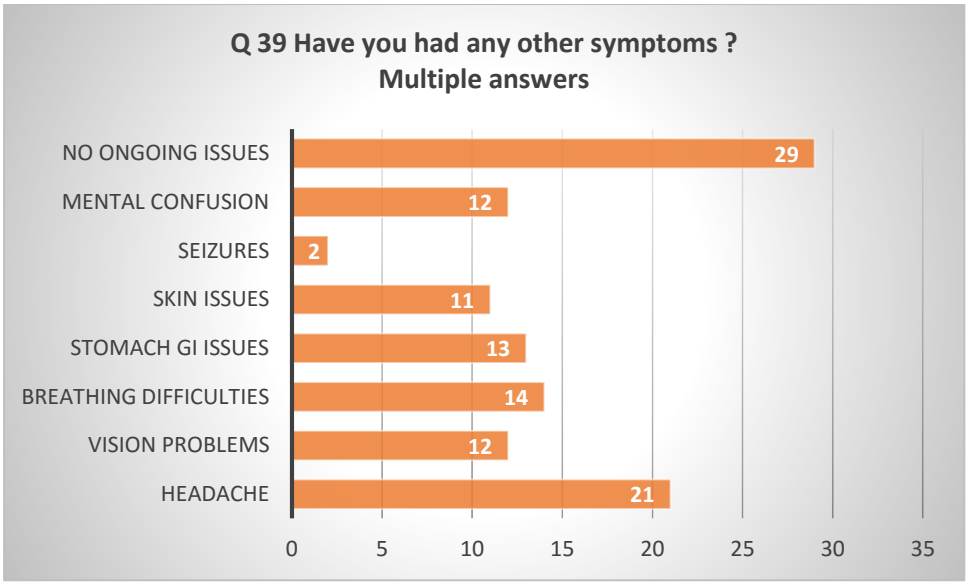
Just over 50 % of patients preferred a weekly treatment and most others would accept a greater frequency than weekly. The same response pattern was seen in the Global Results.



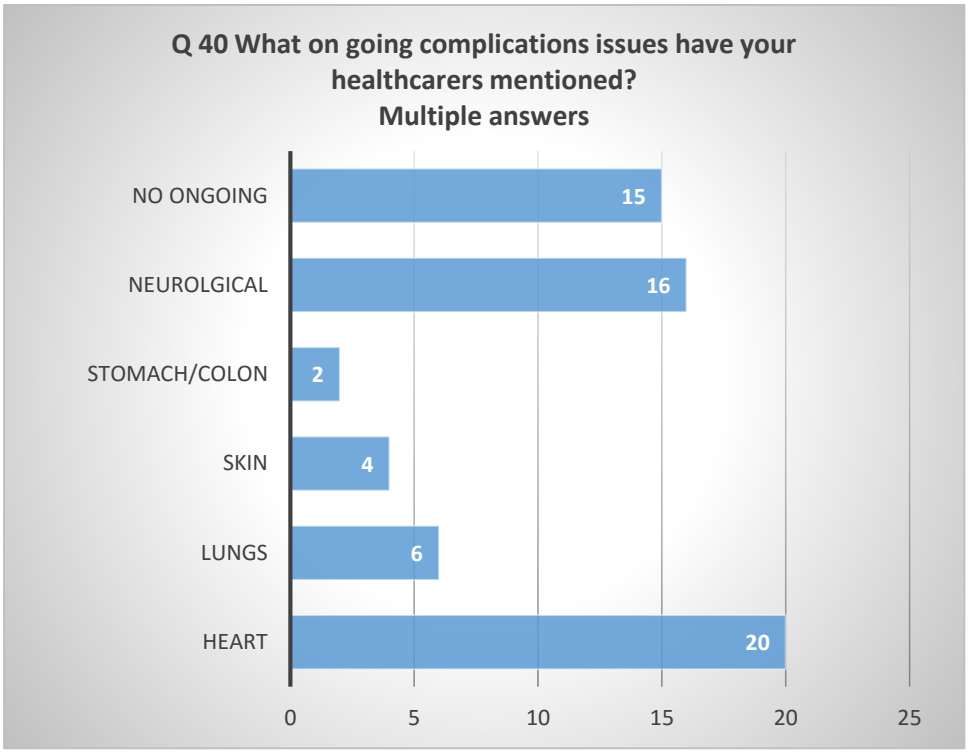
Around 50% of patients felt confident about finding out about treatment developments mostly from their clinicians or a patient group. Around 30% were somewhat sure, with most of the rest uncertain whether they would or not. Overall European patients expressed more confidence in themselves about finding information about treatment developments.



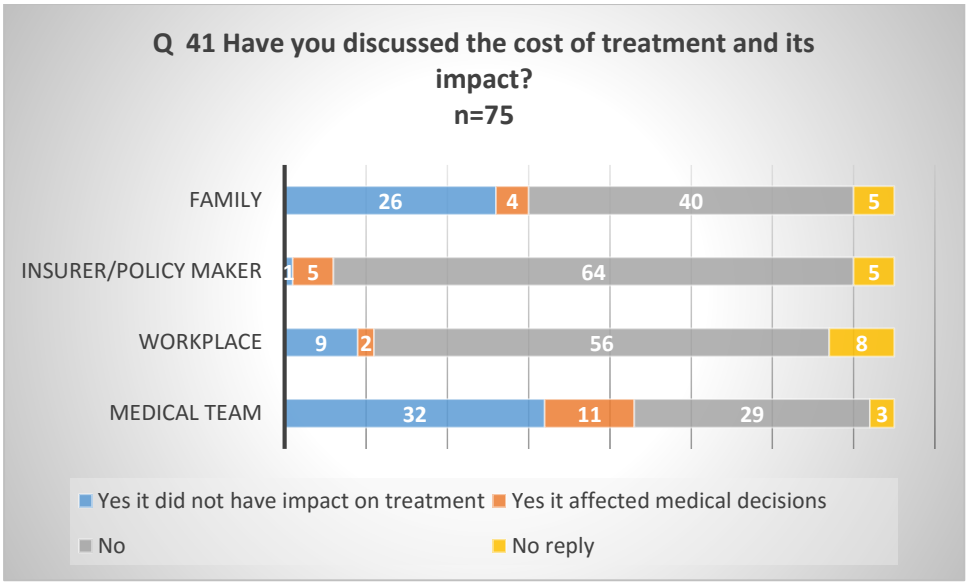
Most patients spend some time getting information about their illness mainly from the internet and patient organisation, though about 30% rely mainly on their doctor for information. The reliance on doctor was more evident in the European results than the Global responses where a more proactive approach to sharing articles with medical staff was markedly higher. Europeans were less likely to use patient organisations for information, but more general internet search levels were stated by European than Global patients.



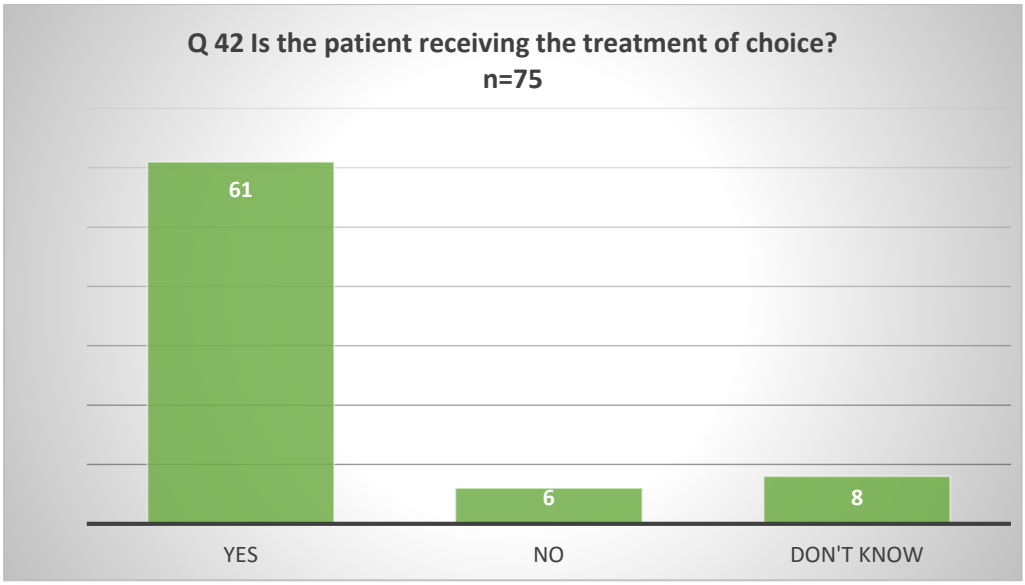
By far the highest response was that there are no ongoing issues with treatment, and headaches were the most common of those who did experience issues. Mental confusion, skin issues, stomach GI issues, Breathing difficulty and vision problems were broadly at the same level of experience. Overall the European patients expressed relatively fewer ongoing problems than patients did Globally.



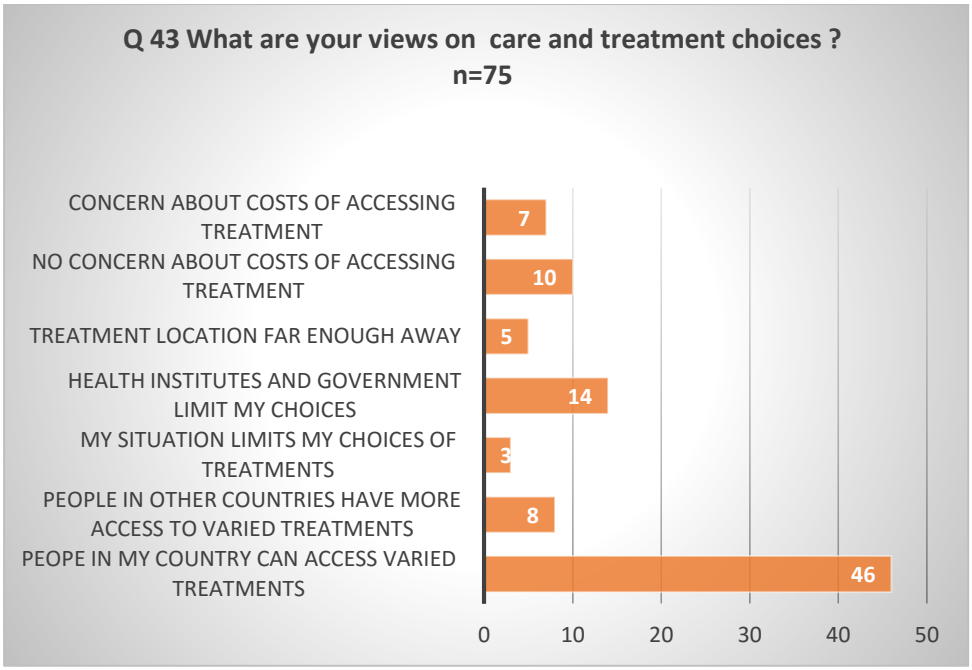
Heart and neurological impacts are most cited complications of aHUS by health carers which was the case too for Global patients, but a similar pattern of response to Question 39 emerged with European patients reporting far fewer examples of their health carers mentioning complications.



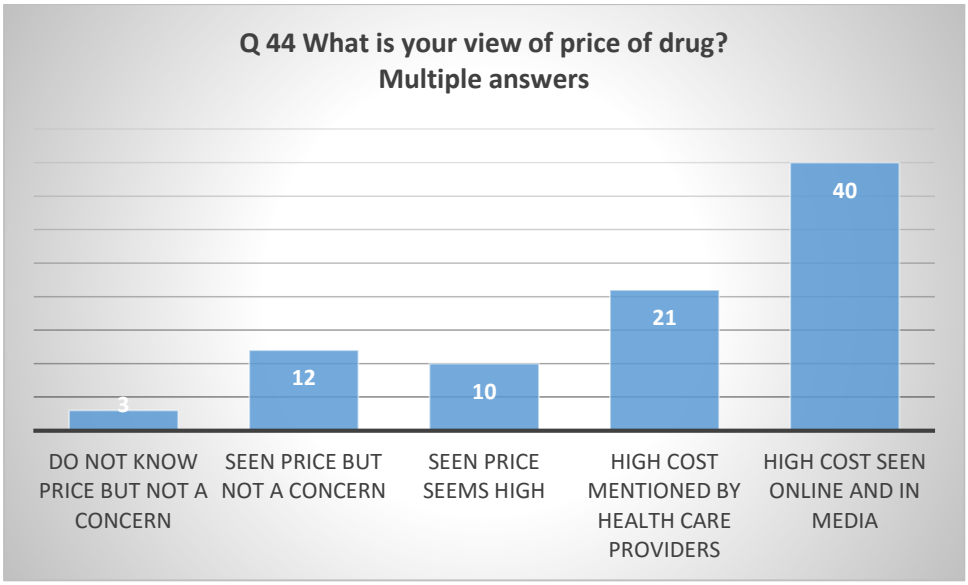
Cost of treatment is mostly talked about with family and clinicians ,and only in the latter case has it had an effect on medical decisions. A similar pattern of responses was found in the Global Results.



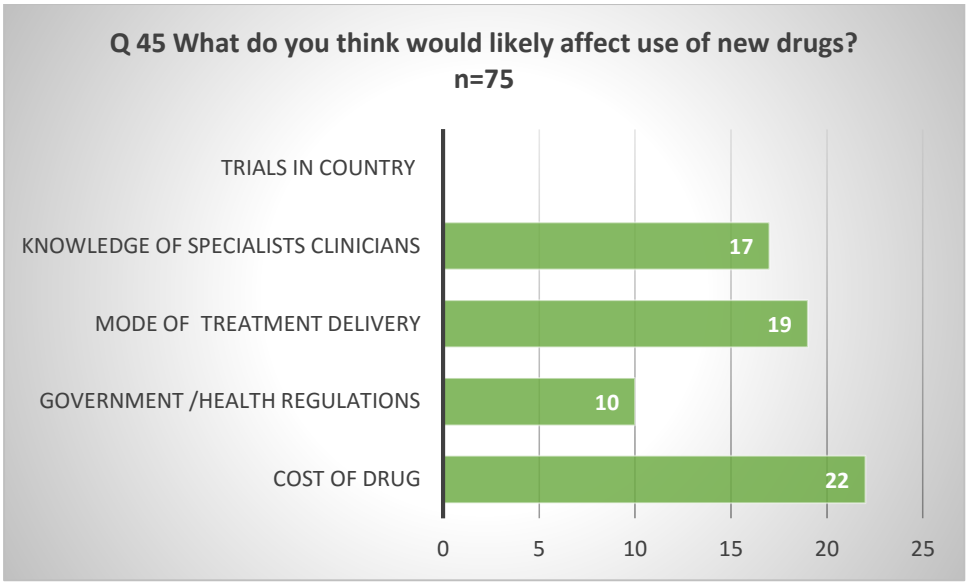
80% of patients said they were on their treatment of choice. A similar response to that expressed Globally although there was a slight difference between “do not know” and “no”. aHUS Patients would appear to are more



Most patients responded that people in their country can access varied treatment and a lesser number say they have limited choices. A small number have concerns about the cost of treatment or limited choices because of their personal circumstances. Although the view on “people in my country can access varied treatment” was similar European patients are relatively less concerned about costs and limited access than Global patients.

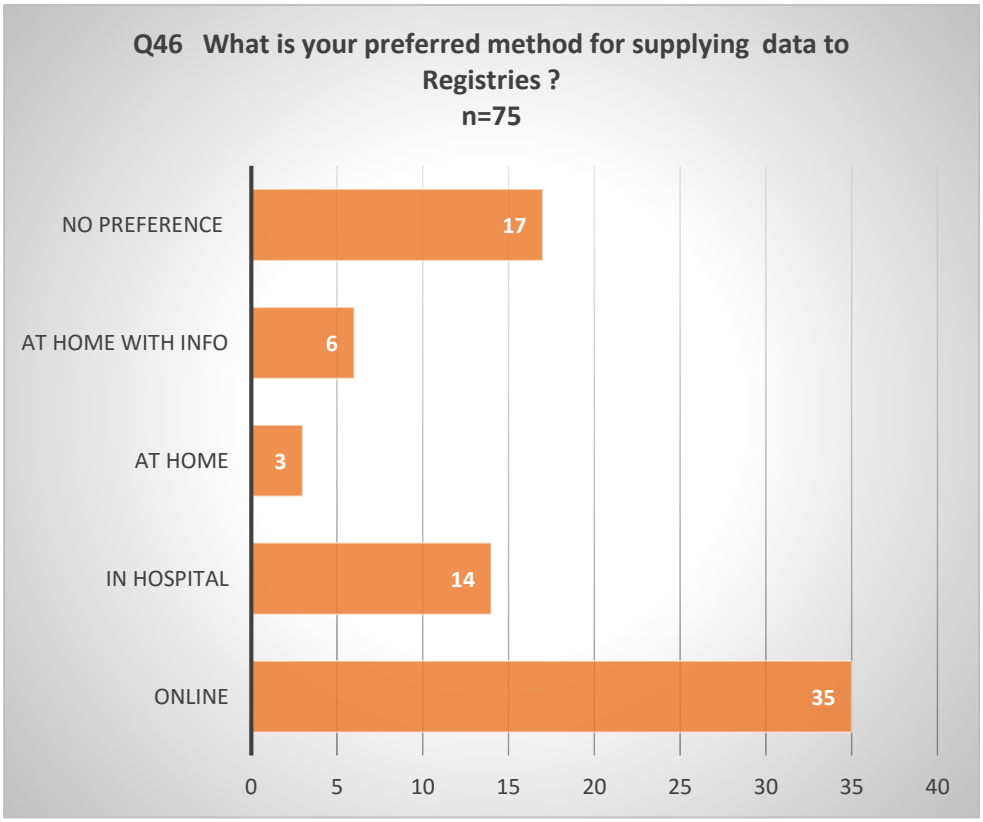


The highest response was awareness of the high cost of drugs, either seen on line/in the media or mentioned by the health care providers. Very few were not aware of the price, nor concerned about it. The only view in which European respondents differed to those Globally was in not saying the price seems high, where nine times as many Global respondents thought that it was. Perhaps the case for “value” has been emphasised more in European evaluations and communication.



Most responses suggest that the cost of new drugs would most affect their use, as well as its method of delivery. Just a few less thought the knowledge of specialist clinicians would have an impact; but no one saw having trials in country as having any affect. More included trials as a way to affect use in their country in the Global Results and Global patients thought that clinicians played a bigger part.

Part of Section 5 Research and Registry Participation



By far the most preferred method of supplying data to registries is to do it on line, although a sizeable minority would wish to continue to do it as part of their hospital visit routine. Not many

would wish to complete written questionnaires at home. An almost identical spread of response was found in the Global Results.

More information can be found at www.ahusallianceaction.org