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CHANGING PARADIGMS OF HEMOPHILIA CARE ACROSS LARGER SPECIALIZED TREATMENT CENTERS IN THE EUROPEAN REGION

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SELECTED HIGHLIGHTS

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BACKGROUND



- Early 2021, the European Collaborative Haemophilia Network (ECHN) conducted a survey to determine whether the paradigms of care have changed with the introduction of novel therapies for people with haemophilia¹⁻³
- A survey was conducted in 19 ECHN centres from 17 countries in the European region⁴
- The **aim** of the survey was to⁴:



Mahlangu J, et al. N Engl J Med. 2018;379:811-822; 2. Srivastava A, et al. Haemophilia. 2020;26 Suppl 6:1-158;
 Young G, et al. Expert Rev Hematol. 2018;11:835-846; 4. Windyga J, et al. Ther Adv Hematol. 2022. DOI: 10.1177/20406207221088462

RESULTS PATIENT AND CENTRE DEMOGRAPHICS



- Centres treated a total of 4,710 people with haemophilia A, 1,067 people with haemophilia B, and 1,569 carriers^a
 - 1,792, 655, and 2,263 had mild, moderate, and severe haemophilia A
 - 417, 217, and 433 had mild, moderate, and severe haemophilia B
- 13 centres treated both adults and children
 - 4 centres treated adults only
 - 2 centres treated children only
- The most common age group being treated across both haemophilia A and B and across all disease severities was age 19-60 years



Countries included in the ECHN survey 2021

RESULTS ORGANISATION, FUNDING, AND COLLABORATION



- Most centres (18/19) were part of a university or teaching hospital
- All centres have at least one accreditation
 - Comprehensive care centre was most common designation (17 centres)
- Centralised government **funding** was the most common source of funding (14/19 centres)
- **Collaboration** between centres is commonplace (90%)
 - More than half of the centres share treatment protocols/guidelines
- 18 centres participate in national **registries**, 11 in international registries
- Cooperation with patient organisations and industry is commonplace (85%)
- All centres have a strategy for personalisation of treatment

RESULTS TREATMENT PATTERNS: PROPHYLAXIS

- Most patients with severe haemophilia were treated with prophylaxis
 - Only 5% of respondents reported reaching an annualised bleeding rate of 0 in >76% of these patients
- Prophylaxis is less common in mild and moderate haemophilia
- Immune tolerance induction (ITI) is still a priority in patients with inhibitors in most centres
 - ITI is commonly used alongside other therapies (e.g. emicizumab prophylaxis)
 - ITI use is guided by previous success of ITI, efficacy of current therapy, venous access, quality of life, and availability of alternative or combination therapies

Estimated percentage of patients currently using prophylactic treatment for mild, moderate, severe haemophilia (number of respondents)^a



^a Number in column indicates number of respondents; N=19 respondents for mild, moderate, and severe haemophilia, respectively HA, haemophilia A; HB, haemophilia B; ITI, immune tolerance induction Windyga J, et al. Ther Adv Hematol. 2022. DOI: 10.1177/20406207221088462



RESULTS CHALLENGES RELATED TO RESOURCING AND ORGANISATION (1)

- **Time limitations** related to research are a key concern
- Around one-third of centres report an optimal network of centres in their country as an ongoing concern
- More than half of centres indicate availability of online patient-data registries as an ongoing concern
- **Cost issues limiting access** to therapies is an ongoing concern
- Clinical trial infrastructure
 represents an ongoing concern







GP, general practitioner; NRT included both non-replacement and non-factor replacement therapy; sc, subcutaneous; TMA, thrombotic microangiopathies Windyga J, et al. Ther Adv Hematol. 2022. DOI: 10.1177/20406207221088462

RESULTS CHALLENGES RELATED TO RESOURCING AND ORGANISATION (2)

- Concern related to the increasing cost of therapies is near-universal
- There is ongoing concern related to the increasing complexity of treatment and monitoring requirements
 - Access to skilled staff is an area of concern
 - Education and training is an ongoing concern
- Although around half of centres participate in gene therapy trials, more than half of centres overall indicated they are not ready for implementation outside of clinical trials and concern related to risks/challenges overall was near-universal

What challenges do you see with the innovations mentioned in this questionnaire? Increasing cost of treatment 95% Challenges/risks associated with gene 95% therapy Completely novel mechanisms of 84% actions of novel agents Thrombotic complications or TMA 84% associated with NRT Laboratory issues with monitoring of 79% novel agents Funding of the centre 68% Lack of young doctors with interest in 58% haemophilia Lack of adequate supervision on novel 53% sc therapies, prescribed by a GP 20 100 0 60 80 40



RESULTS AVAILABILITY OF PRODUCTS BY LICENSING AND REIMBURSEMENT STATUS



- Availability of treatment options varies across countries and centers and, in the case of
 products that are not yet licensed, is limited to use in a clinical trial setting
- Extended half-life products and non-factor replacement therapies were the most 'available', with unrestricted access in the highest number of centers (14/19 and 12/19 centers, respectively)
- Non-factor replacement therapies and extended half-life products were most commonly available free of charge, either as a standard therapy or as part of a clinical trial

RESULTS



Country	Non-factor replacement therapies	Extended half-life products	Non-replacement therapy	Gene therapy
Czech Republic	Unrestricted availability; reimbursed	Unrestricted availability; reimbursed	Not available	Not available
Spain	Unrestricted availability; reimbursed	Unrestricted availability; reimbursed	Unrestricted availability; reimbursed	Unrestricted availability; reimbursed
Slovenia	Unrestricted availability; reimbursed	Unrestricted availability; reimbursed	Not available	Not available
Ireland	Unrestricted availability; reimbursed	Unrestricted availability; reimbursed	Available in clinical trials only	Available in clinical trials only
Belgium	Unrestricted availability; reimbursed	Unrestricted availability; reimbursed	Not available	Available in clinical trials only
Norway	Limited availability; reimbursed ^a	Unrestricted availability; reimbursed	Not available	Available in clinical trials only
Austria	Unrestricted availability; reimbursed	Limited availability; reimbursed where available	Available in clinical trials only	Available in clinical trials only
Germany	Unrestricted availability; reimbursed	Unrestricted availability; reimbursed	Available in clinical trials only (n=1)	Available in clinical trials only (n=2)
(S centers)			Not available (n=2)	Not available (n=1)
Croatia	Unrestricted availability; reimbursed	Limited availability; reimbursed where available	Available in clinical trials only	Not available
Poland	Limited availability; reimbursed where available ^a	Not available	Available in clinical trials only	Not available
Italy	Unrestricted availability; reimbursed	Unrestricted availability; reimbursed	Unrestricted availability; reimbursed	Available in clinical trials only
Slovakia	Limited availability; reimbursed where available ^a	Limited availability; reimbursed where available	Not available	Not available
Sweden	Limited availability; charges may apply ^a	Limited availability; reimbursed where available	Available in clinical trials only	Available in clinical trials only
Netherlands	Limited availability; reimbursed where available	Limited availability; reimbursed where available	Not available	Limited availability; reimbursed where available
Israel	Unrestricted availability; reimbursed	Limited availability; charges may apply	Available in clinical trials only	Available in clinical trials only
France	Unrestricted availability; reimbursed	Unrestricted availability; reimbursed	Available in clinical trials only	Available in clinical trials only
Turkey	Limited or no availability; no data on reimbursement available	Limited or no availability; no data on reimbursement available	Limited or no availability; no data on reimbursement available	Limited or no availability; no data on reimbursement available

^a For patients with haemophilia A with inhibitors only.

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Haemophilia care across specialised centres European region in 2022

- We have started to see to tangible benefits of improved protocols of care
- Accreditation, collaboration, and personalisation of treatment is commonplace
- The use of prophylaxis is well-aligned across centres, and is near-universal in severe haemophilia
 - However, issues related to annualised bleeding rates persist
- Access to and availability of treatments is not universal across the region

Unmet needs and key challenges in haemophilia care 2022

- Key ongoing concerns include costs and accessibility, time limitations, and human resources
- Standards and protocols, as well as the centres themselves, will have to **continue to evolve** if they are to provide the highest level of care
- To meet this requirement, there is a clear need for engaging, ongoing education programs for healthcare professionals working in the field of haemophilia that can be adjusted to the changing landscape of haemophilia therapy and monitoring

CONCLUSIONS





In 2022, we have started to see to the **tangible benefits** of developments in protocols of care, driven by efforts of the haemophilia community over the past decade



Key challenges remain to resourcing and organisation, with cost/access issues, time limitations, and education and staffing being paramount



As innovation increases costs and drives complexity, finding adequate solutions that will allow **universal access to haemophilia treatment** might prove to be the greatest challenge of all

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