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**THE HEART OF MEDICAL EDUCATION**

# KEY DEVICE ATTRIBUTES FOR INJECTABLE SOMATOSTATIN RECEPTOR LIGAND THERAPY IN ACROMEGALY AND NEUROENDOCRINE TUMOURS

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## SELECTED HIGHLIGHTS

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# FUNDING AND CONFLICT OF INTEREST

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**Please note:** The views expressed within this presentation are the personal opinions of the authors. They do not necessarily represent the views of the author's academic institution.

## Disclosures:

- Shlomo Melmed has received grants and/or honoraria from Ionos, Ipsen, Novo Nordisk, Pfizer
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# BACKGROUND

- A significant proportion of individuals with **acromegaly and neuroendocrine tumours (NETs)** are treated with **injectable somatostatin receptor ligands (SRLs)**<sup>1, 2</sup>
  - Treatment includes both proprietary and generic options, and is characterised by its **long-term nature and considerable costs**<sup>2</sup>
- Comprehensive attribute insights guide **shared healthcare professional (HCP) and patient decisions**, impacting usability, storage, preparation, injection comfort, and therapeutic outcomes
  - This informed approach addresses patient needs effectively, **potentially leading to better treatment adherence and results**<sup>3-5</sup>
- The **lack of comprehensive real-world data** significantly **limits the evaluation of injection experiences across different groups**, including registered HCPs, non-HCP caregivers, and self-administering patients
  - This can hamper a holistic understanding of challenges and benefits associated with the injection process

# STUDY OBJECTIVES

To define the **key SRL device attributes** that are associated with the **best injection experience** by:

1. People living with acromegaly and NETs
2. Injectors
3. Prescribers

in order to provide clear guidance on the **key attributes** that HCPs, patients, and caregivers are seeking from SRL devices today and in the future

# PARTICIPANTS AND METHODS

- **Survey development**

- Survey questions were crafted with input from the Scientific Committee, including endocrinologists, specialist nurses, and patient representatives
- Two surveys were developed, one for patients/caregivers and another for HCPs, covering demographics, device experience, preferences, design, and ideal attributes

- **Survey participation and approach**

- Patients, non-HCP caregivers, and HCPs from 11 countries took part in the survey via patient support organisations (INCA and WAPO), author efforts, and social media
- Institutional review board exemption status was obtained

- **Attribute groupings and scoring**

- Device attributes were divided into pre-injection, post-injection, design, and general categories, with participants scoring attributes on a 1 to 5 scale
- The 'Top 5' ideal attributes were ranked, and open responses collected as additional feedback

# HCP AND PATIENT/CAREGIVER SURVEY: RESPONDENTS DEMOGRAPHICS

# HCP AND PATIENT/CAREGIVER SURVEY: DEMOGRAPHICS

Demographics	Patients/Caregivers			HCP (n=52)
	Total (N=211)	Acromegaly (n=54)	NET (n=157)	
<b>Country</b>				
USA	36%	41%	35%	19%
Denmark	22%	20%	22%	23%
Spain	21%	2%	27%	10%
Australia	7%	0%	10%	4%
Canada	4%	2%	4%	0%
Norway	3%	11%	1%	10%
Mexico	3%	13%	0%	6%
Ireland	2%	9%	0%	0%
UK	1%	2%	1%	13%
Chile	0%	0%	0%	15%
<b>Age in years</b>				
18-29	1%	2%	1%	2%
30-45	10%	22%	6%	40%
46-64	52%	50%	53%	48%
>65	37%	26%	40%	10%
<b>Gender</b>				
Male	26%	17%	29%	
Female	74%	83%	71%	
Unspecified <sup>a</sup>	<1%	0%	<1%	

<sup>a</sup> One patient with NET responded 'rather not say' to the question regarding gender identification; this is indicated as <1% for transparency



# **PATIENT/CAREGIVER SURVEY: RESULTS**

## **N=211**

# PATIENT/CAREGIVER SURVEY: INJECTION EXPERIENCE

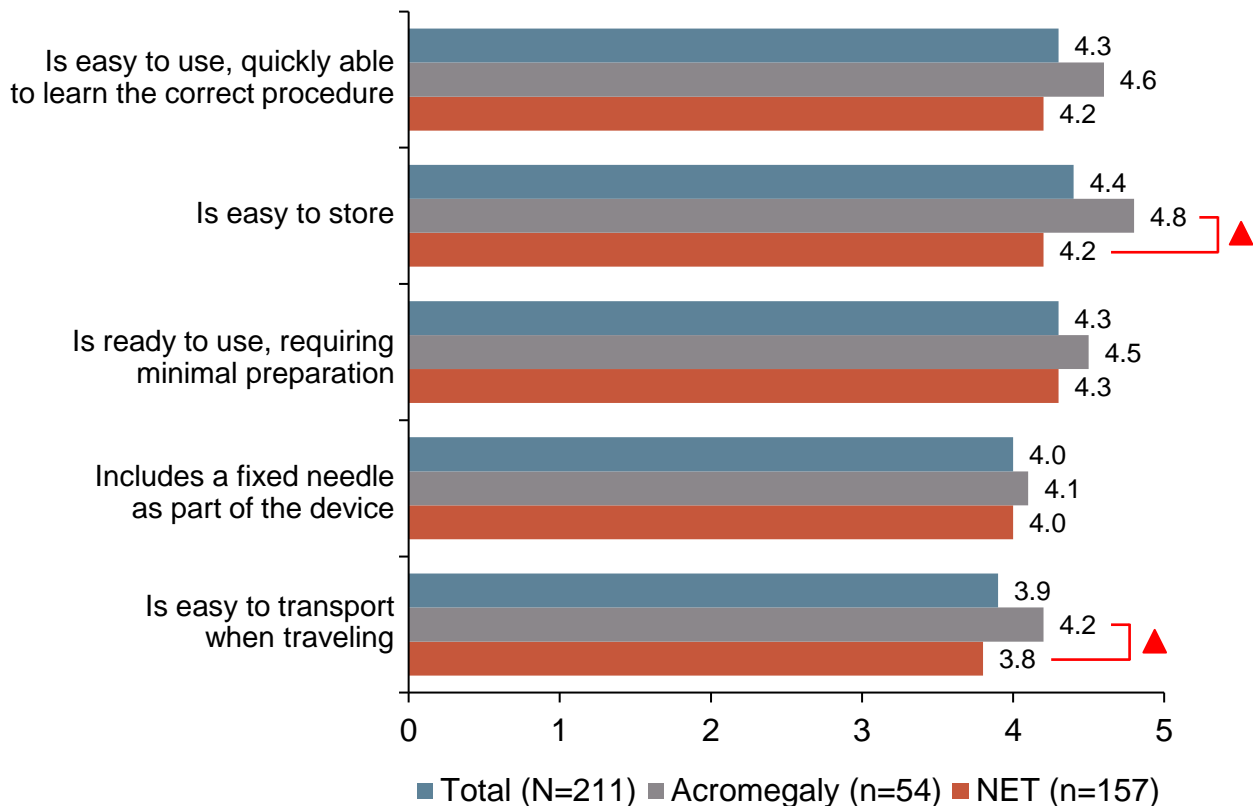
Treatment experience	Total (N=211)	Acromegaly (n=54)	NET (n=157)	p value
<b>Duration of SRL treatment</b>				
6 months to 1 year	13%	11%	14%	NS
1-3 years	26%	24%	27%	NS
3-5 years	22%	24%	21%	NS
5-10 years	21%	11%	24%	NS
10-15 years	12%	19%	10%	NS
>15 years	6%	11%	4%	NS
<b>Injection experience</b>				
Self-injection	14%	26%	10%	NS
HCP administers the injection in a hospital/clinic setting	46%	26%	54%	0.05
HCP administers the injection outside the hospital/clinic setting	17%	17%	17%	NS
Home injection by HCP	11%	9%	11%	NS
Caregiver injection <sup>a</sup>	12%	22%	9%	NS
<b>Number of device types used</b>				
1	51%	44%	53%	NS
2	39%	41%	38%	NS
3	10%	13%	9%	NS
4	<1% <sup>b</sup>	2%	0%	NS

<sup>a</sup> This question seems to have been confusing. Only 1 caregiver answered that they administer injections (which is inconsistent with other answers, confirming they do administer injections); therefore, all responses regarding 'caregiver injection' have been gathered together

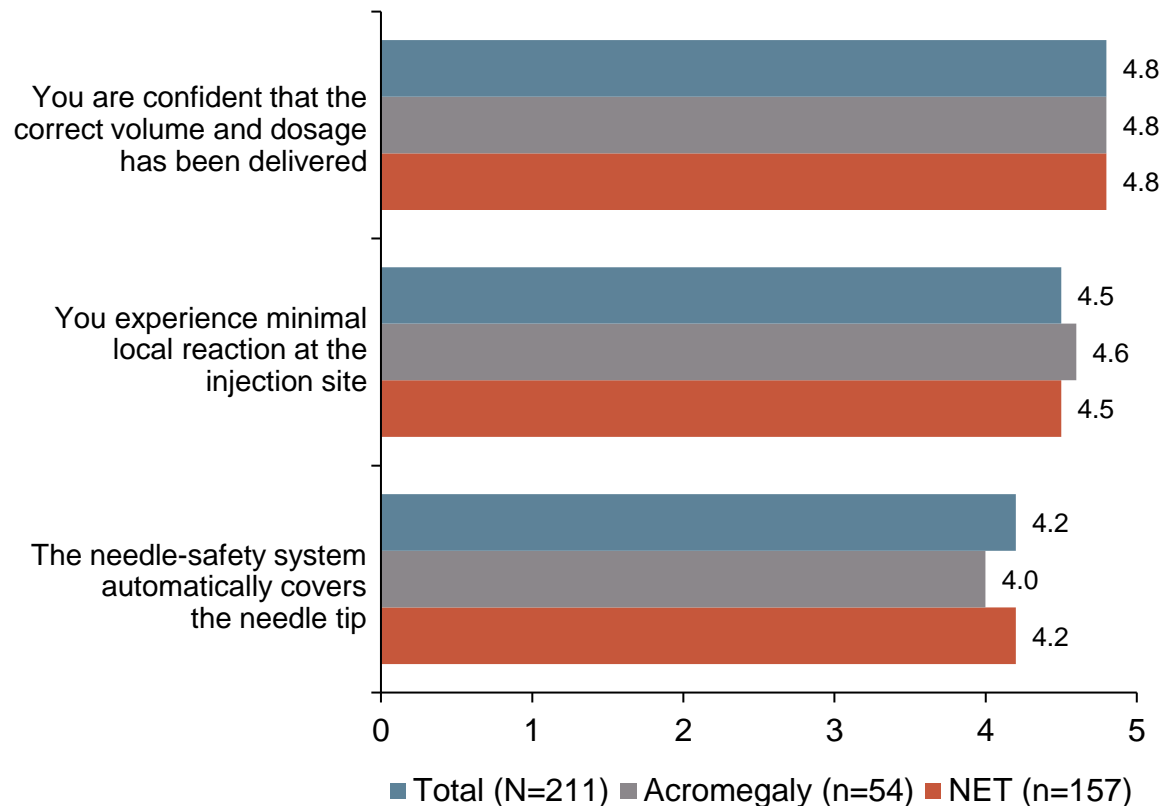
<sup>b</sup> One respondent (caregiver, acromegaly) indicated having experience of 4 SRL devices; this is indicated as <1% for transparency

# PATIENT/CAREGIVER SURVEY: SRL PRE- AND POST-INJECTION PREFERENCE

## PRE-INJECTION PREFERENCE



## POST-INJECTION PREFERENCE

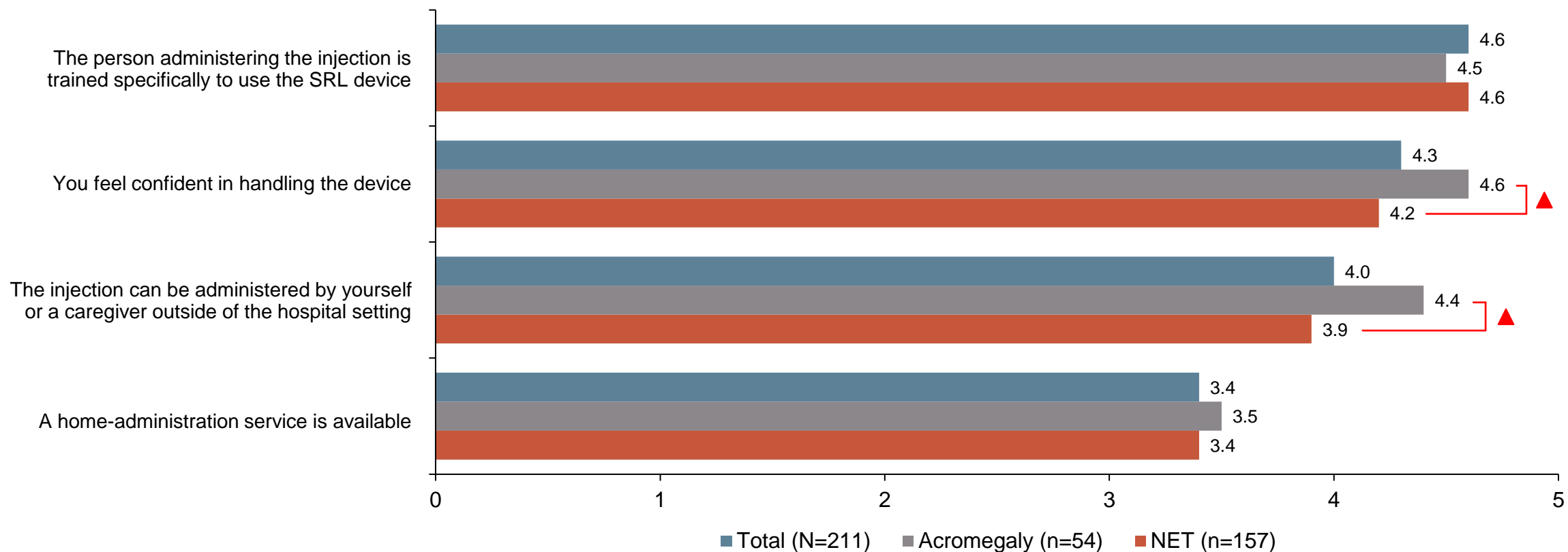


**Patients with acromegaly self-inject more than patients with NET; self-injection-related attributes seem to be more important to this group**

**Confidence that the full dose is delivered and minimal local reaction are important after the injection**

Red triangle indicates numerically higher mean score difference that did not reach significance  
NET, neuroendocrine tumour; SRL, somatostatin receptor ligand

# PATIENT/CAREGIVER SURVEY: GENERAL PREFERENCES



**It's important to patients/caregivers that the person administering the injection is well trained; this is also mentioned often in the free-text fields**

**Patients with acromegaly seem to self-inject more than patients with NET; self-injection-related attributes seem to be more important to this group**

Red triangle indicates numerically higher mean score difference that did not reach significance

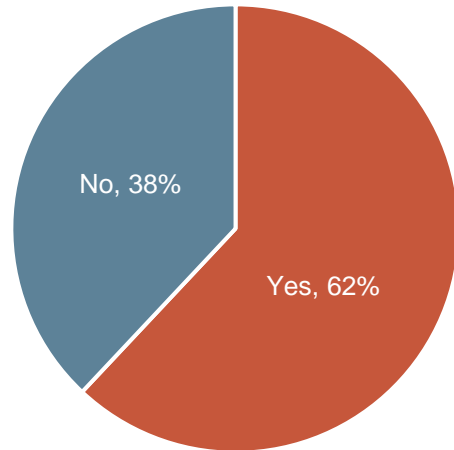
NET, neuroendocrine tumour; SRL, somatostatin receptor ligand

# HCP SURVEY: RESULTS

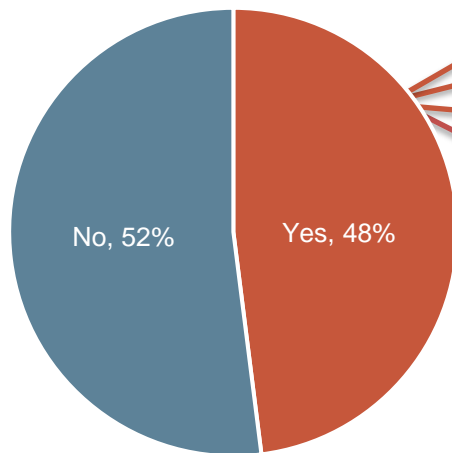
## N=52

# HCP SURVEY: INJECTION EXPERIENCE

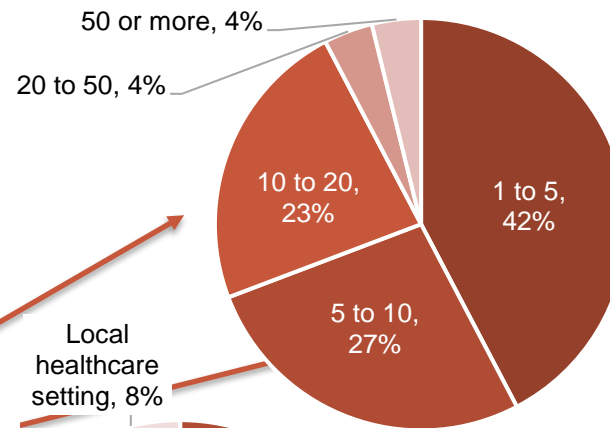
HCPs prescribing SRLs (N=52)



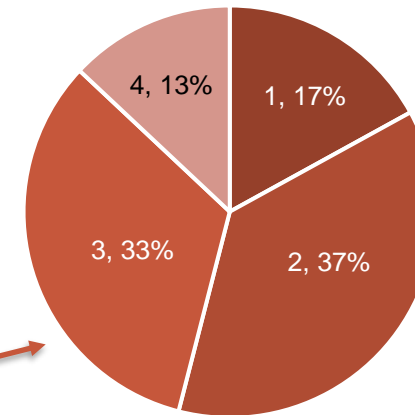
HCPs administering SRL injections (N=52)



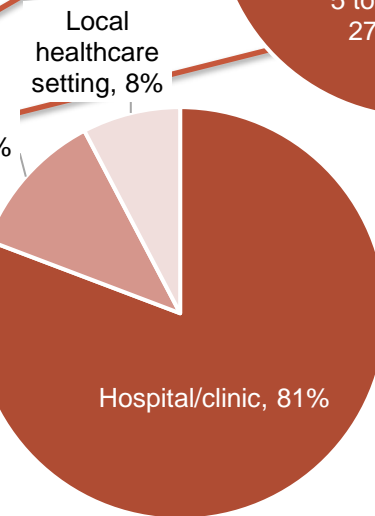
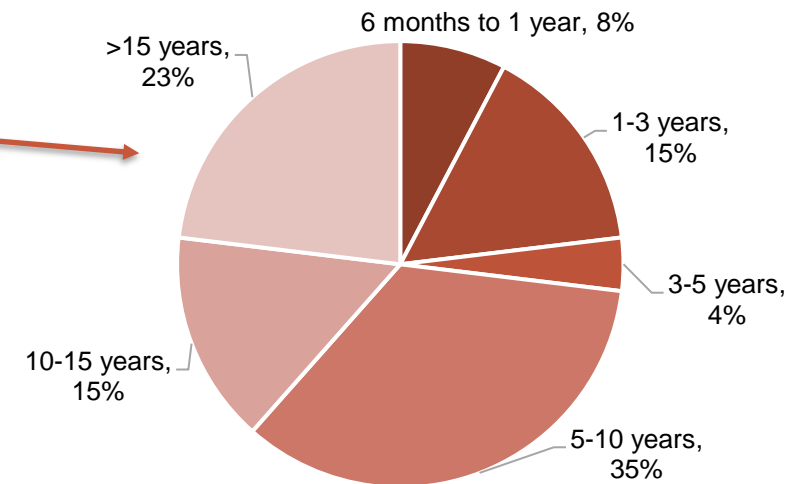
Number of injections administered per month



Experience with number of devices



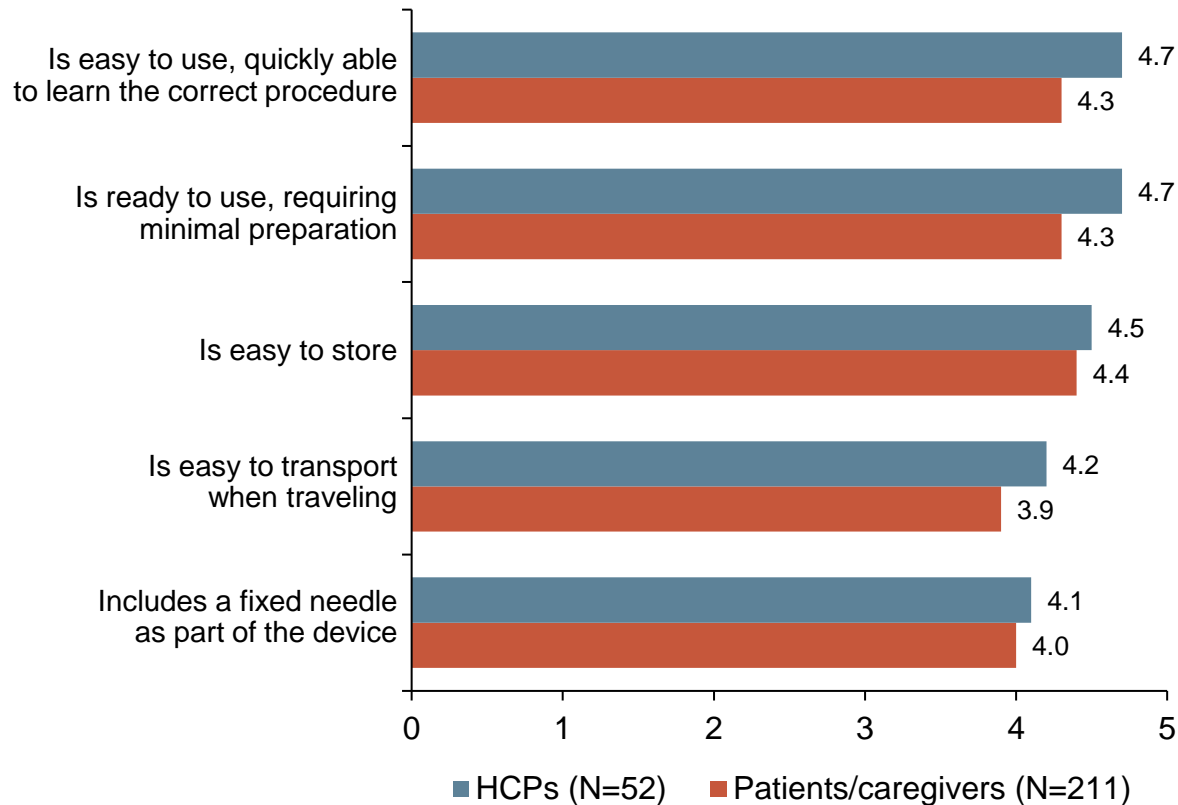
Years of experience administering injections



Injection location

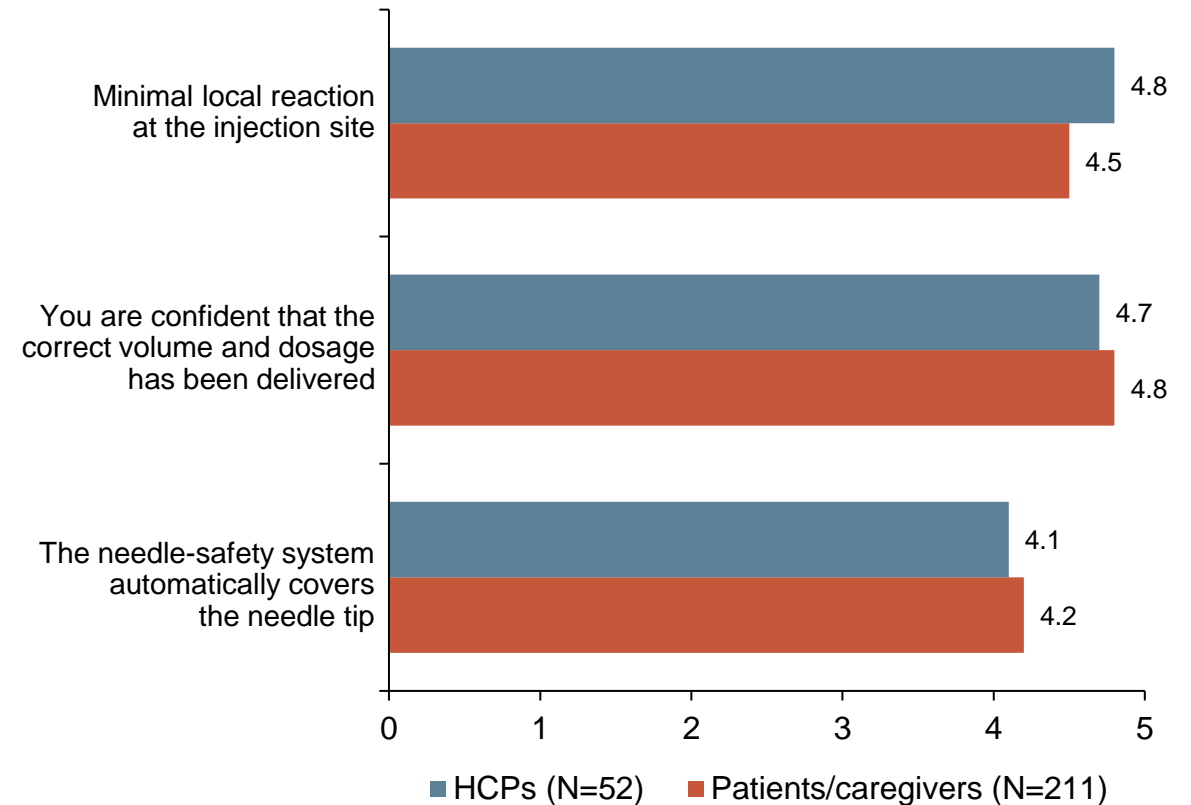
# HCP SURVEY: SRL PRE- AND POST-INJECTION EXPERIENCE

## PRE-INJECTION PREFERENCE



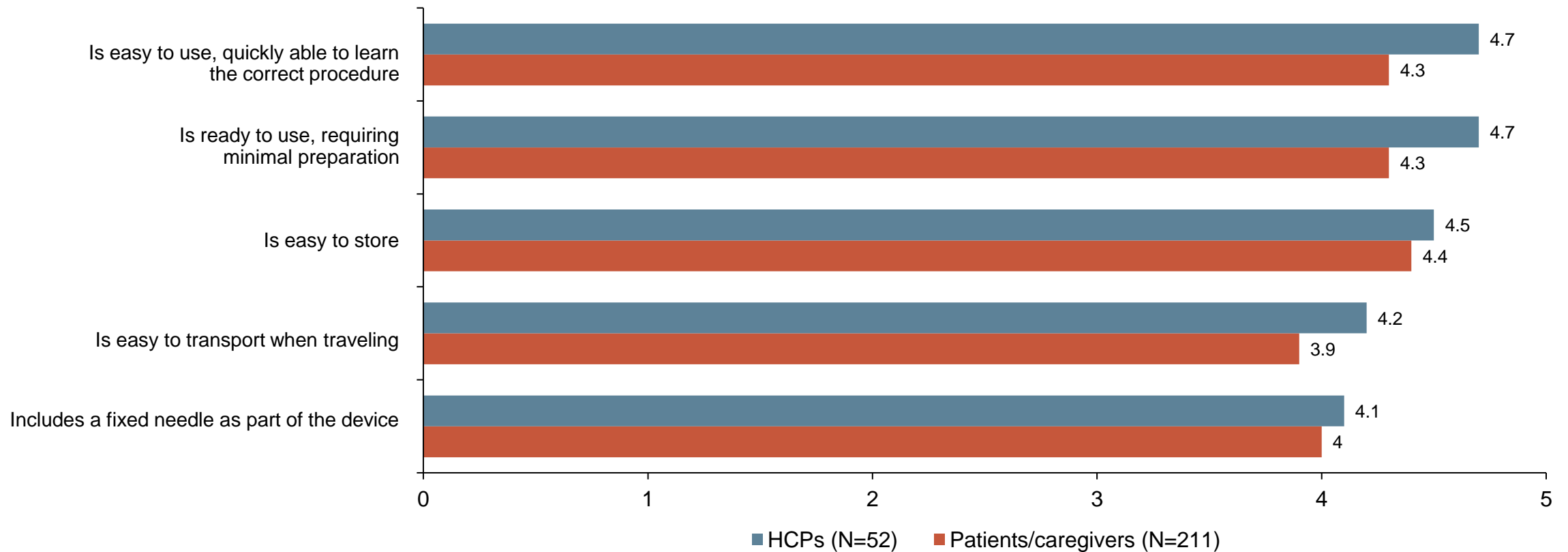
**HCPs were stronger in their preferences, but the order of preference is similar to that of the patients/caregivers**

## POST-INJECTION PREFERENCE



**Similar responses for patients and HCPs for post-injection attributes**

# HCP SURVEY: GENERAL PREFERENCES



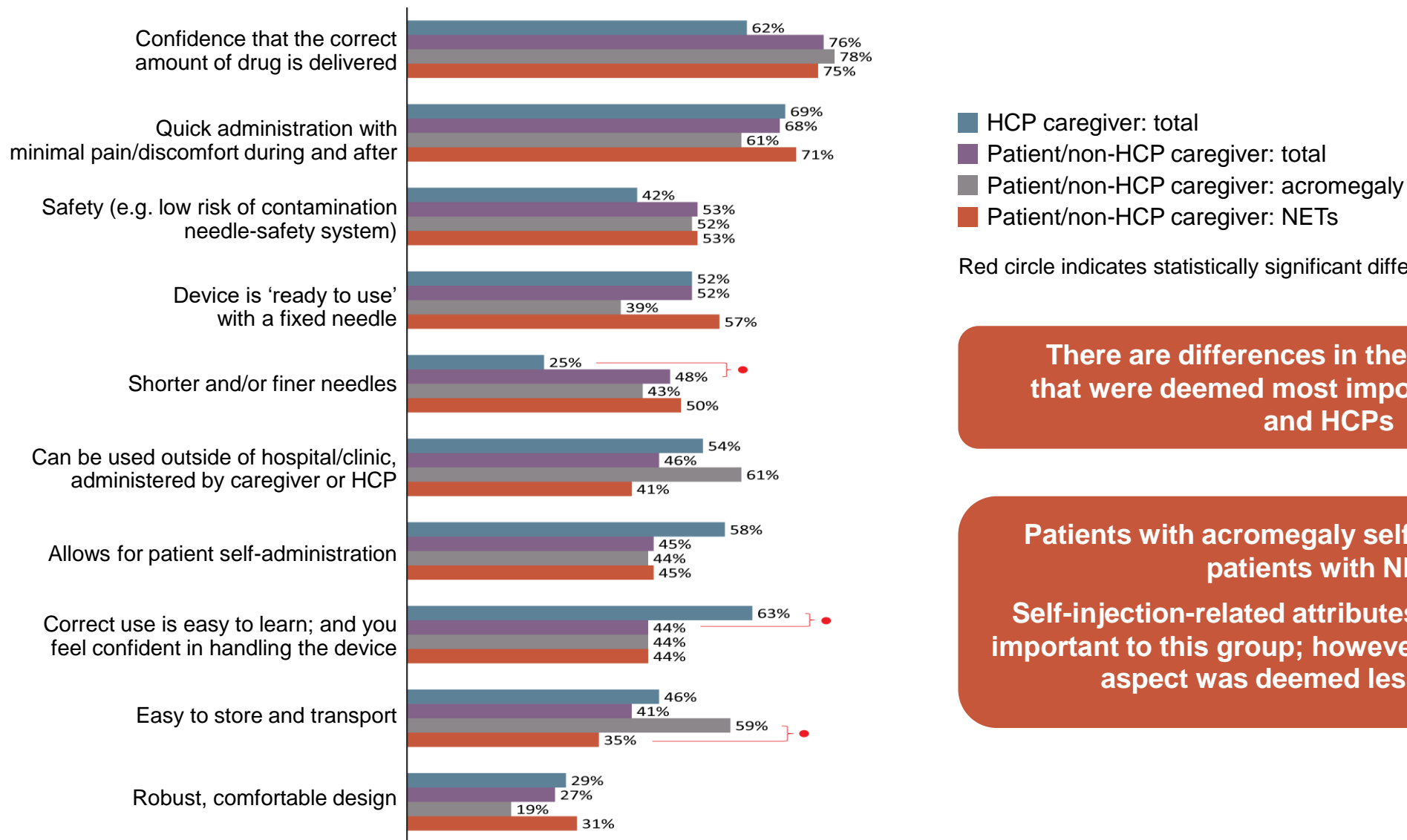
**Attributes relating to administration outside the clinic were desired more by HCPs than by patients**



# HCP AND PATIENT/CAREGIVERS SURVEY RESULTS: 'TOP 5' IDEAL ATTRIBUTES OF AN SRL DEVICE

# TOP 5 IDEAL ATTRIBUTES OF AN SRL DEVICE

## PERCENTAGE OF RESPONDENTS SELECTING ATTRIBUTE AS ONE OF THEIR TOP 5 MOST DESIRED



- HCP caregiver: total
- Patient/non-HCP caregiver: total
- Patient/non-HCP caregiver: acromegaly
- Patient/non-HCP caregiver: NETs

Red circle indicates statistically significant difference (p<0.05)

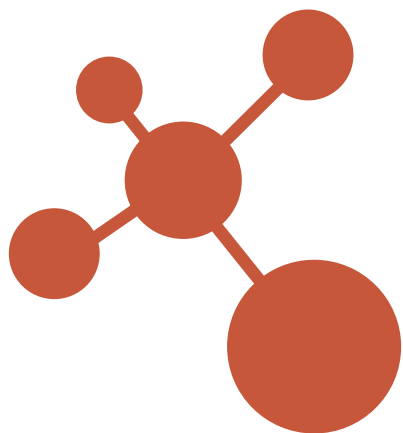
There are differences in the ideal attributes that were deemed most important by patients and HCPs

Patients with acromegaly self-inject more than patients with NETs  
Self-injection-related attributes seem to be more important to this group; however, the 'ready-to-use' aspect was deemed less important

# DISCUSSION

- Attributes that significantly impact the treatment experience for both patients and caregivers include **ease and confidence of device use, device safety** with a focus on minimising contamination risks, and the ability of the device to **lessen the burden of injections**
- The survey also underscores **the need to boost confidence in administering SRL injections**, encompassing non-HCP caregivers and self-injecting patients
  - Achieving this involves **device-specific training, patient education, instructional videos, online resources, and continued support from HCPs**
- Limitations of the study include potential bias from the greater proportion of NETs vs. acromegaly respondents, regional distribution, and potentially high level of engagement of survey participants vs. broader patient population, **impacting the survey's generalisability across populations**

# CONCLUSION



## Evolving landscape

Despite current high satisfaction levels, the landscape of injectable SRL devices is undergoing change due to new devices and oral treatment options



## Patient and caregiver influence

Patient and caregiver opinions play a crucial role in advancing device design, enabling shared decision-making, and selecting suitable injection devices tailored to individual therapeutic requirements



## Optimising care

Patient and caregiver input in injectable SRL device design is essential for enhancing care quality in individuals with acromegaly and NETs

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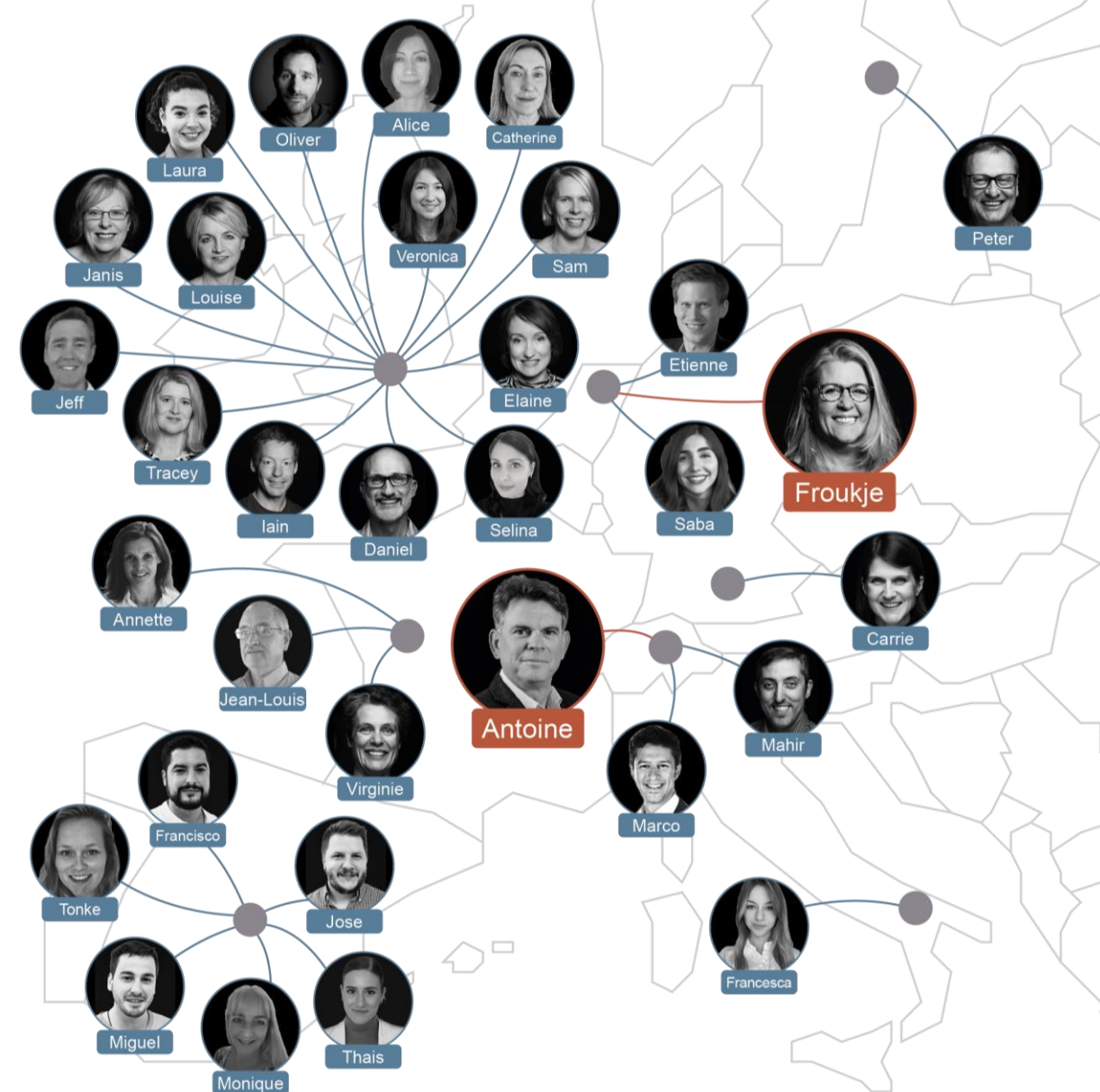
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