



PHUSE EU Connect 2021

LI02 - "The ongoing modernization Journey at Orion Pharma"

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AGENDA

01

Orion's R&D renewal process

02

Orion's Business requirements for the modernization journey

03

Mapping Orion's requirements and SAS Health capabilities

04

Defining & Execution the 'Plan on A Page'

05

Conclusion

Orion at a glance (2020 figures)



Net sales
1,078 MEUR



Operating profit
280 MEUR



Personnel
3,311



R&D investments
123 MEUR



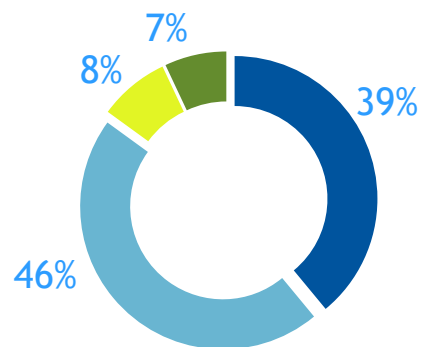
6 production sites in Finland



Own sales unit in **26** European countries,
Singapore, Malaysia and Thailand

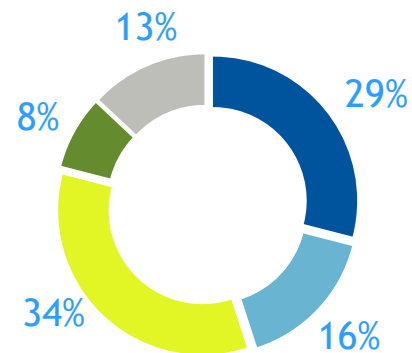
Established in **1917**

Sales by business



- Proprietary Products
- Specialty Products
- Animal Health
- Fermion & CM*

Sales by market area



- Finland
- Scandinavia
- Other Europe
- North America
- ROW

*) Contract manufacturing

Renewal of R&D - starting point Jan 2021

STRENGTHS



Hormonal cancer drug discovery



Parkinson's disease drug discovery



ALS Ph3 program in neurological rare diseases area



Investments 2017-2020

- Large molecules
- Digital medicine / AI



Orion has a solid financial basis to support RD

AREAS TO DEVELOP



Build a balanced pipeline with continuous feed of clinical projects



Increase success rate and speed

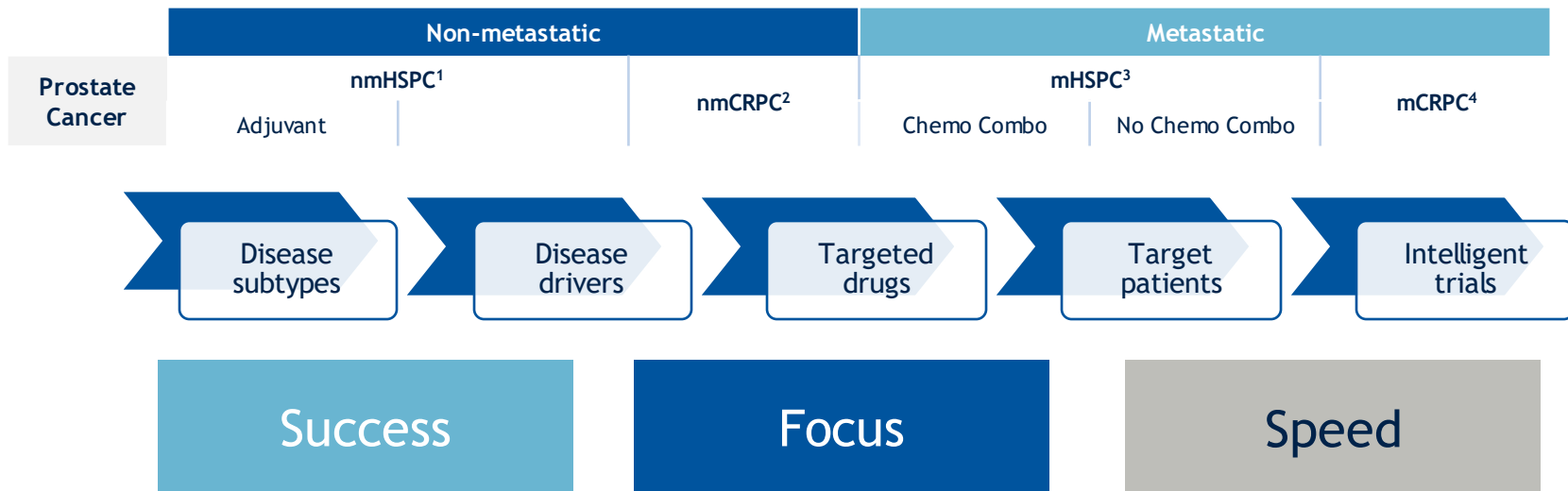


Science & Data driven organisation

- Focused strategy in Oncology and Neurological Diseases



We follow the patient's journey and transform science into life-changing medicines



1) nmHSPC = non-metastatic hormone-sensitive prostate cancer 2) nmCRPC = non-metastatic castration-resistant prostate cancer
3) mHSPC = metastatic hormone-sensitive prostate cancer 4) mCRPC = metastatic castration-resistant prostate cancer

SAS in cloud - key ideas/expectations in the planning phase

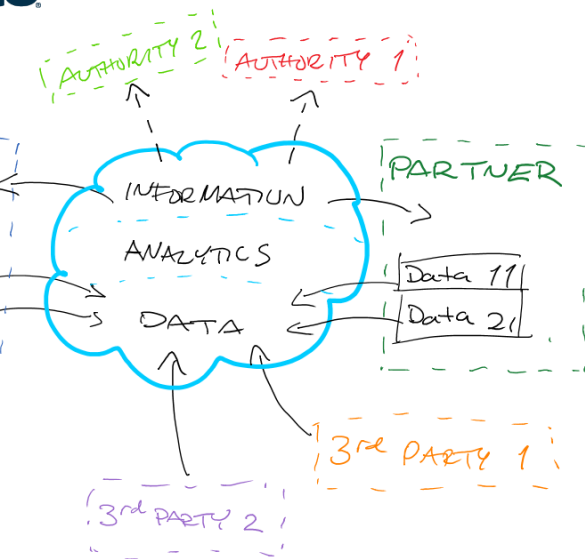
Modernisation of SAS use



Renewed clinical data processes



Extension SAS use to discovery/research phase



Scalability, performance, speed



Smart joint data sharing platform for partners/CROs/vendors



Streamlined data flow from data sources



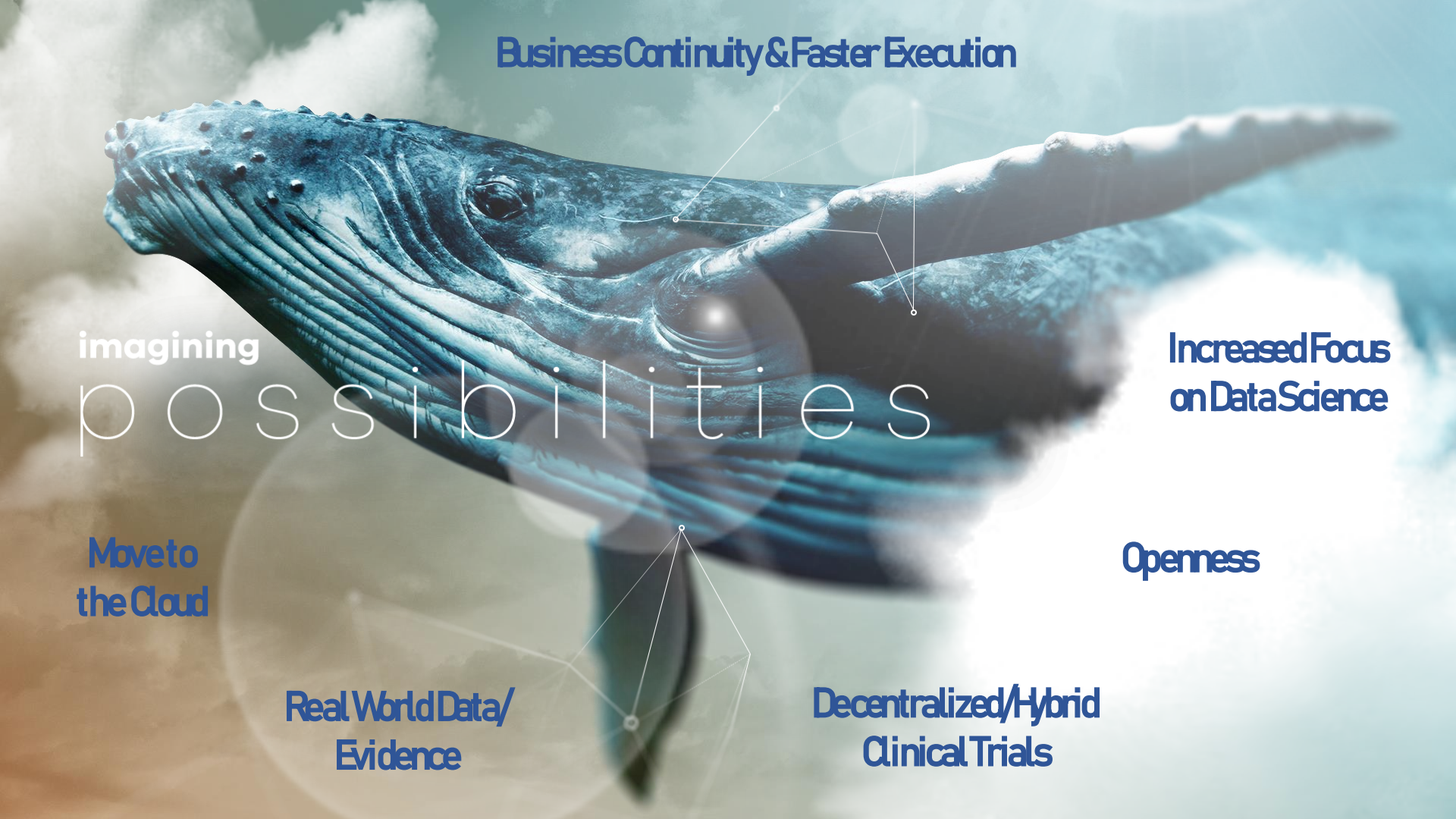
SAS analytics workspace for external scientifics



A photograph of a man and a young boy looking at a laptop screen. The man is on the left, smiling, and the boy is on the right, also smiling. They are both looking at the screen. The background is slightly blurred, showing a blue wall and a colorful patterned object.

Empower Innovation.
Improve Lives.

Our Vision

A blue whale is shown swimming in the ocean, facing left. The whale's body is covered in a network diagram consisting of white lines and dots, representing a digital or technological overlay. The background is a soft, hazy blue and white, suggesting a cloudy sky or ocean surface.

Business Continuity & Faster Execution

imagining
possibilities

**Increased Focus
on Data Science**

**Move to
the Cloud**

Openness

**Real World Data/
Evidence**

**Decentralized/Hybrid
Clinical Trials**

Why SAS Health, powered by SAS Viya, for Clinical Development



Business Continuity & Faster Execution

- SAS Compute engine (SAS9) as part of [SAS Viya](#)
 - Foundational Activities
- SAS Cloud Analytic Service ([CAS](#)) engine as part of SAS Viya
 - Expand Workload / Faster Execution
- SAS Life Science Analytics Framework (*industry accelerator*)
 - [SAS and R](#)



Hybrid/Decentralized Trials

- Last mile of Analytics – [Turn your code into Apps](#) leveraging [SAS Viya REST APIs](#) and [chatbots](#)
- Enable SAS VA content to be easily embedded in a third-party application or web page ([SDK](#))
- [Portability](#) of SAS and open-source models
- [IOT capabilities](#) incl. [streaming data](#) ([Example](#) Hack-in-SAS)
- [Computer Vision](#) (E.g., Home assessments, Drug Intake,...)
- Site & Patient Engagement ([leveraging SAS C1360](#))



Increased Focus on Data Science

- Support FULL [Analytical Life Cycle](#)
- [AI capabilities](#) Out-Of-The-Box i.e., ML, [NLP](#), Computer Vision, Forecasting & Optimization
- 8 years running LEADER → [Analyst Viewpoint](#)
- [US FDA digital transformation](#)



Real World Evidence (RWE)

- [SAS Health](#) – Data Mapper & Cohort Builder (*industry Accelerators*) running on SAS Viya
- Leverage core SAS Viya capabilities for further analysis
- Leverage same enterprise platform – no longer need for separate environments and silos !



Openness

- Visual & Coding interfaces → [Give more people access to analytics](#) !
- Allow people to use the capabilities they're most comfortable with ([SAS](#), [Python](#), [R](#))
- Open Integration capabilities ([SAS.developer.com](#) and [GitHub](#), see also Hack-in-SAS: [Health Track](#))



Move to the Cloud

- [Cloud Native & API-first design](#)
 - Scalability & Fault Tolerance, Minimize Footprint
- [SAS-MSFT partnership](#)
 - Shape future of AI & Analytics in the CLOUD
- Continuous Innovation / Continuous Delivery
- Global Usage Rights
- GxP Qualified deployments track record/audits



Mapping Orion & SAS Health use cases (Oct/Nov 2020)

Modernization of Clinical Environment

1. Faster Execution – SAS Viya: Using CAS for faster inference
2. Modernization of existing SAS Biometrics environment and integrations

Option 1: Enterprise Analytics (Viya) + Industry Solution (LSAF)

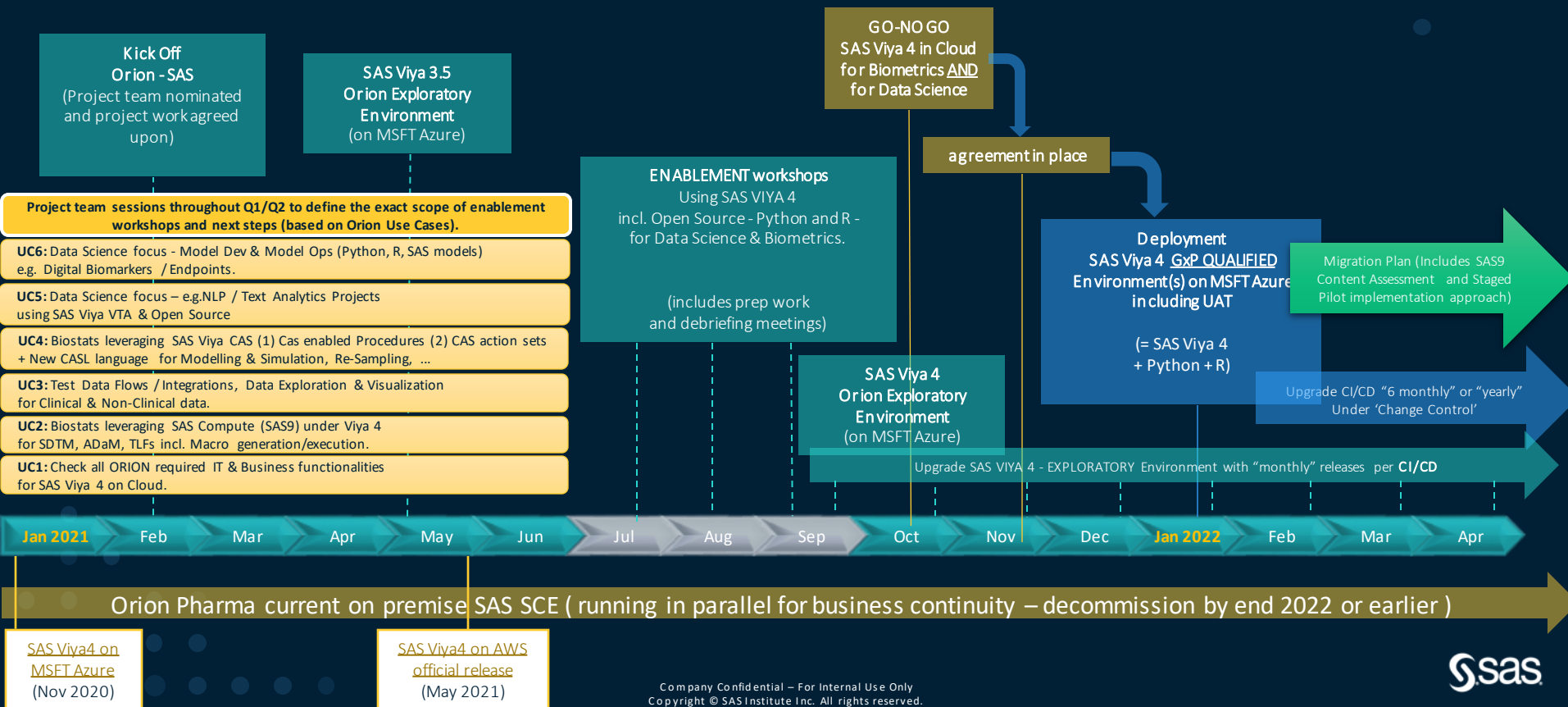
Option 2: Enterprise Analytics (Viya) only

3. Digital Biomarkers / Endpoints
4. Real World Evidence
Enterprise Analytics (Viya) + Industry Solution (Cohort Builder)

From Idea to Solution

1. Analytics Workspaces
2. Automation
SAS Analytics Life Cycle – Dev Ops & Model Ops examples:
SAMD, Computer Vision, Text Analytics
3. Services / Data Driven Web Apps
COVID
Patient & Site Engagement

Orion/SAS 'Plan on a Page' (Sep 2021)



31 Aug

(2-4.30 PM CET)

6 Sep

(2-4.30 PM CET)

14 Sep

(2-4.30 PM CET)

22 Sep

(2-4.30 PM CET)

- Generate SDTM, ADaM & TFL Outputs, leveraging SAS Studio and NFS/EFS
- Git Integration
- Medidata Rave Integration
- P21 Integration
- MSFT Azure Storage (for complete Runs Packages)
- Run SAS programs in Batch ([link](#))
- Transcoding
- Access Controls
- Migration & Content Assessment (EG, DI, Stored Processes,...)

WS1: FOCUS = Foundational Capabilities**

WS2: Automation
(Cont'd Workshop 1)

- Data Lineage for Complete Run (i.e. Interim, Safety, Final)
- Partial Execution programs based on data changes
- Auto Synch between NFS and MSFT Azure storage
- Re-run of previous analysis.
- Shell Script execution
- Different Programming Environments
- Stored Processes (Cont'd WS1)
- Migration & Content Assessment (Cont'd WS1)

- Analytical Life Cycle (Sensor Data use case) – SAS and Open Source (R, Python), Visual & Code interfaces.
- App development on top of SAS Viya
- R integration (WS1 follow up) + RWE ODHSI / OMOP use case with R and SAS Viya
- The Art of the (Already) Possible.

WS3: New Capabilities

WS4: Wrap-Up
Workshop

- Migration Approach & Support (Cont'd)
- Gaps identified and discuss strategies to close/overcome
- Discuss / present parking lot topics
- Next Steps & timelines
- Hands On Access on Orion Environment for Orion team (TBD).

GENERAL IT TRACK (deliverable: Final roadmap for Viya 4 deployment in the Cloud for Orion Pharma starting Jan 2022.)

Feedback Session
Orion-SAS
(Friday 17Sep)
Core Team

The rewards
of having the



courage
to change

Conclusion

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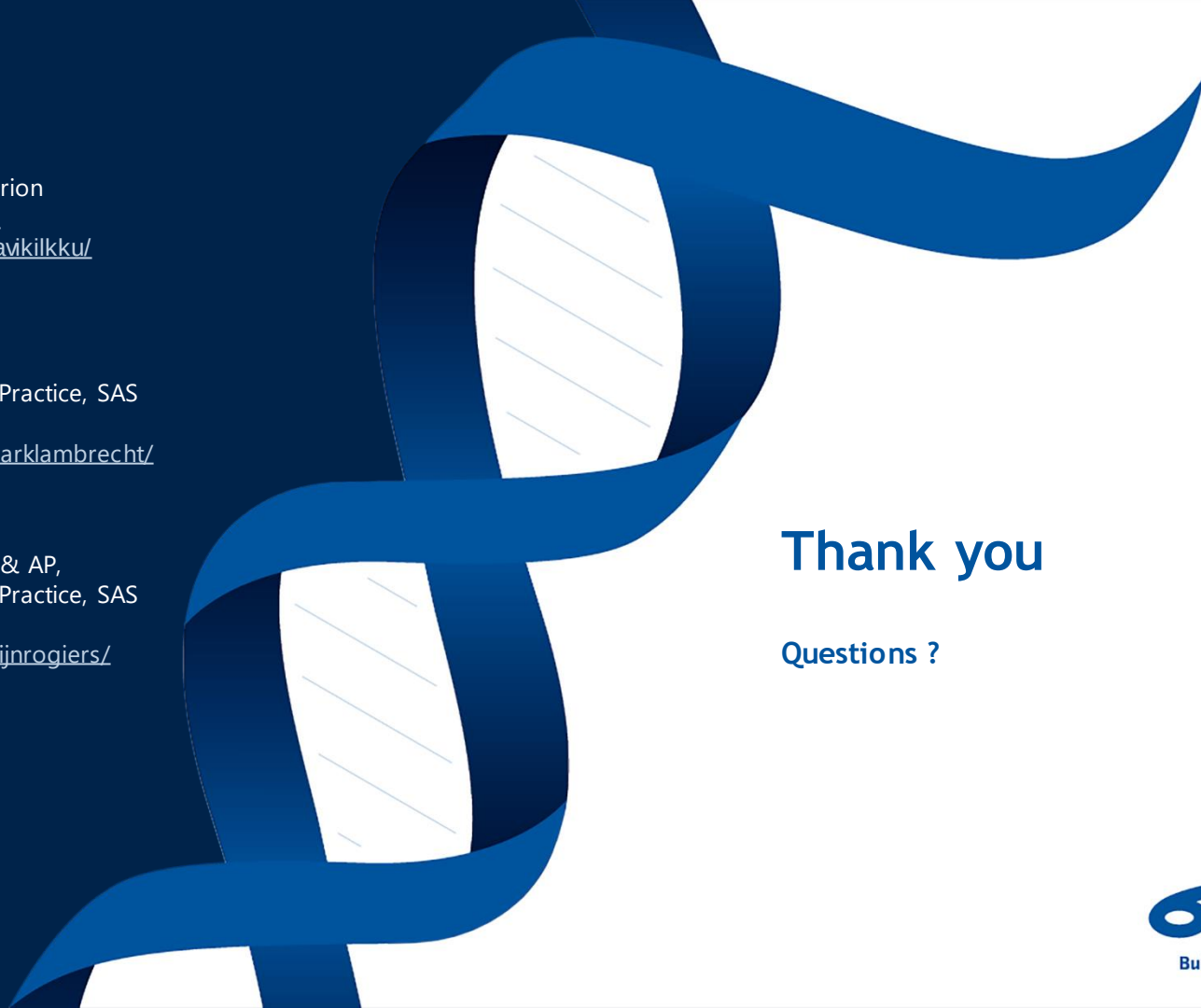


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Thank you

Questions ?



Building our commitment