SUR PRIS advantageaustria.org



"WILL THE MERLION RISE AGAIN"

David Bachmann
ADVANTAGE AUSTRIA



Austrian Exports to Singapore reach record levels

- 2021 I-VI + 44% (EUR 210 Mio)
- 2nd largest market for Austrian products in SEA (after Malaysia)
- Increase through all sectors
- Austrian companies continue to strengthen their hub in SE Asia

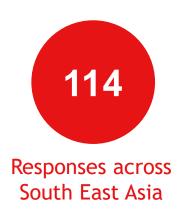
In October, Advantage Austria conducted its annual sentiment survey of Austrian subsidiaries with Singapore taking part for the first time

- Yearly sentiment survey in the Top-25 Austrian export and investment destinations since 2016
 - Standardised questions across years and regions
- Insights on the sentiment among Austrian exporters and subsidiaries shapes regional strategy
- Expanded survey for 2021 included 23 new countries
 - Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam all participated





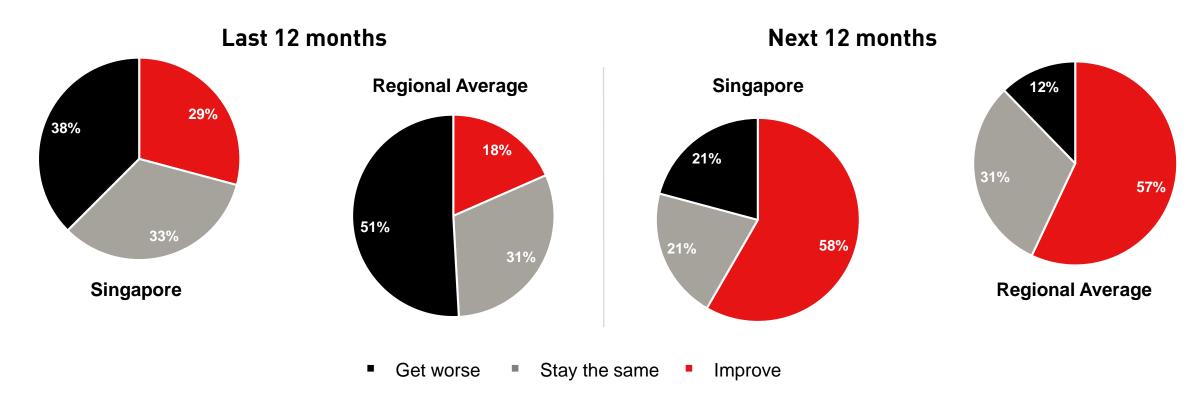






The economic climate has remained more stable in Singapore than the region but with a more pessimistic outlook

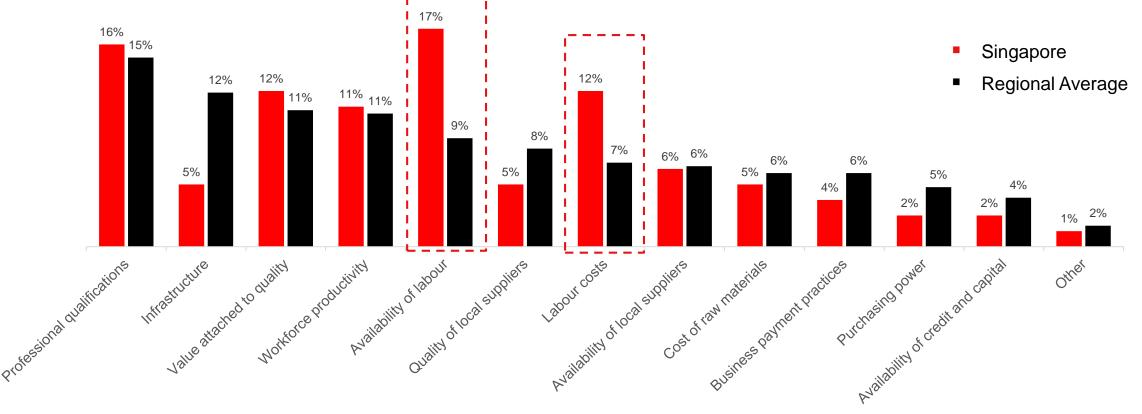
"How would you characterise the current economic climate and state of the economy in the country in which your subsidiary is located?"





Availability and cost of labour are more significant problems for subsidiaries in Singapore compared to the region

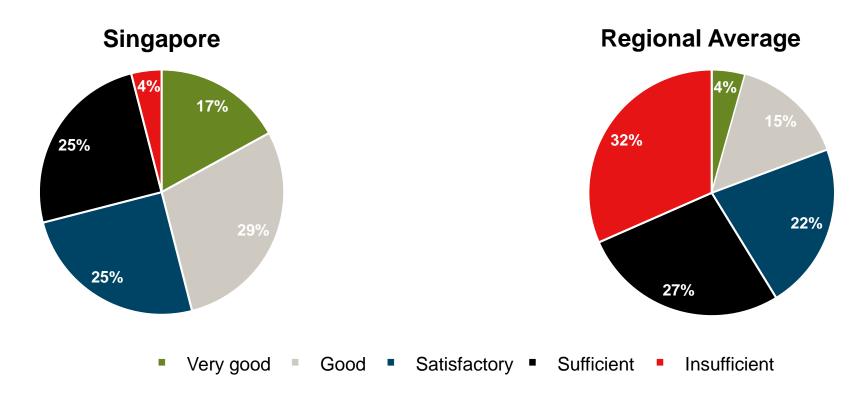
"In which three areas could your local market be made even more attractive for Austrian companies? Where is most room for improvement?"





The impact of the Singapore governments COVID-19 economic measures is rated higher than that of other governments in the region

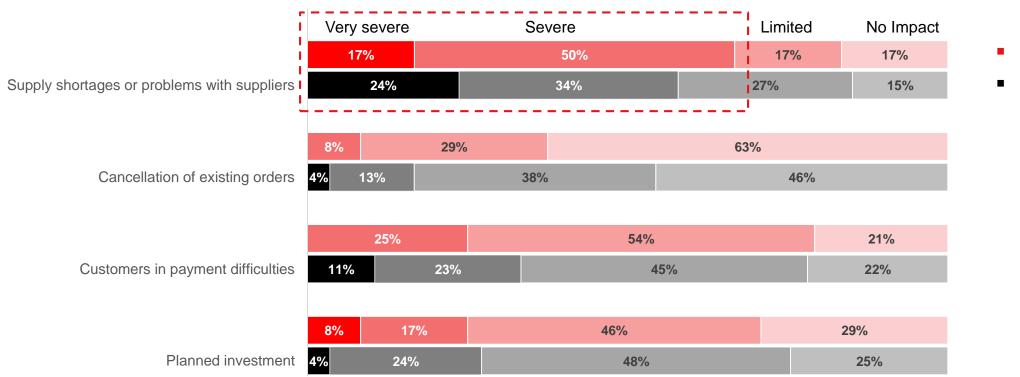
"How would you rate the impact of the measures (especially economic measures) taken by the local government to fight the COVID-19 pandemic on your business?"





Subsidiaries in Singapore experienced worse supply problems but fewer order cancellations and payment issues due to COVID-19

"Looking at the indicators listed below, how would you assess the impact of COVID-19 on your company?" (Subset of categories)

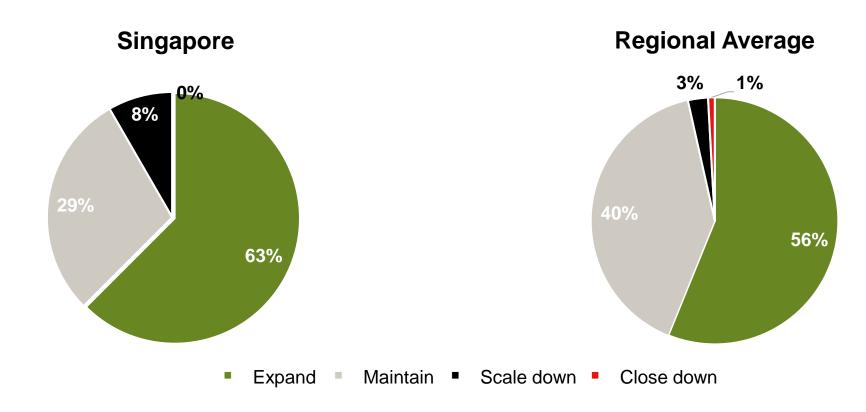


- Singapore
- Regional Average



The majority of subsidiaries, both in Singapore and the wider region, are planning to expand in the coming years

"How are you planning to develop the size of your local business over the next 1-2 years?"



Austrian subsidiaries in Singapore especially value Advantage Austria's role providing networking opportunities

"Looking at the services provided by your local Advantage Austria office, which do you value the most?" (Number of Responses, Singapore)



"Bildungsscheck" – go international

Wie hoch ist der Förderbetrag?

Gefördert werden 50% der Schulungskosten. Maximal 7.500 werden pro Unternehmen ausbezahlt.

Was wird gefördert?

Schulungskosten für MitarbeiterInnen an Auslandsniederlassungen ab Datum der Antragstellung. Thematischer Fokus: Betriebswirtschaft, Internationalisierung und Export.

Was wird <u>nicht</u> gefördert?

Innerbetriebliche Schulungen, Verrechnungen innerhalb eines Unternehmensverbunds, Reisekosten, reine Sprachkurse oder Teambuilding-Maßnahmen, gesetzlich vorgeschriebene Schulungen (z.B. Brandschutz, Arbeitssicherheit)

Wer kann einen Förderantrag einreichen?

Das österreichische Unternehmen (WK-Mitglied).

Nein, die Auslandsniederlassung kann den Antrag leider nicht stellen. D.h. es braucht eine gute Koordination zw. Auslandsniederlassung und Headquarter in Österreich.

SUR PRIS INGLY advantageaustria.org



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COVID 19 SITUATION AND OUTLOOK

Sebastian Maurer-Stroh

Executive Director, Bioinformatics Institute

BII and ID Labs, A*STAR

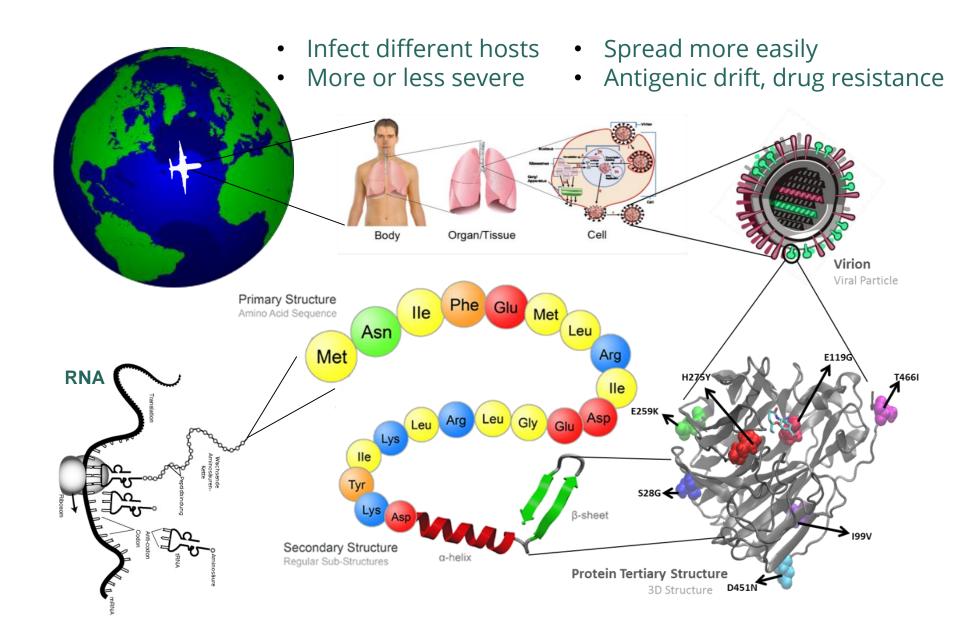
DBS, NUS

NPHL, NCID GISAID

2 December 2021

From the sequence and structure we can partially deduce important properties of the virus





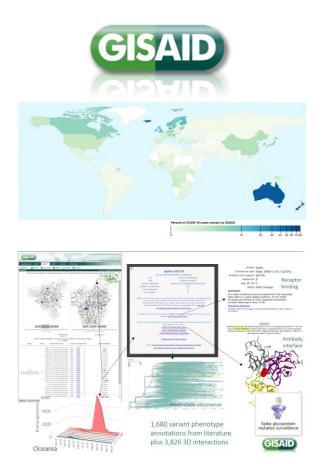
How can we track viruses and their evolution?

- Trusted sharing platform
- Real-time genomic surveillance

The right analysis tools

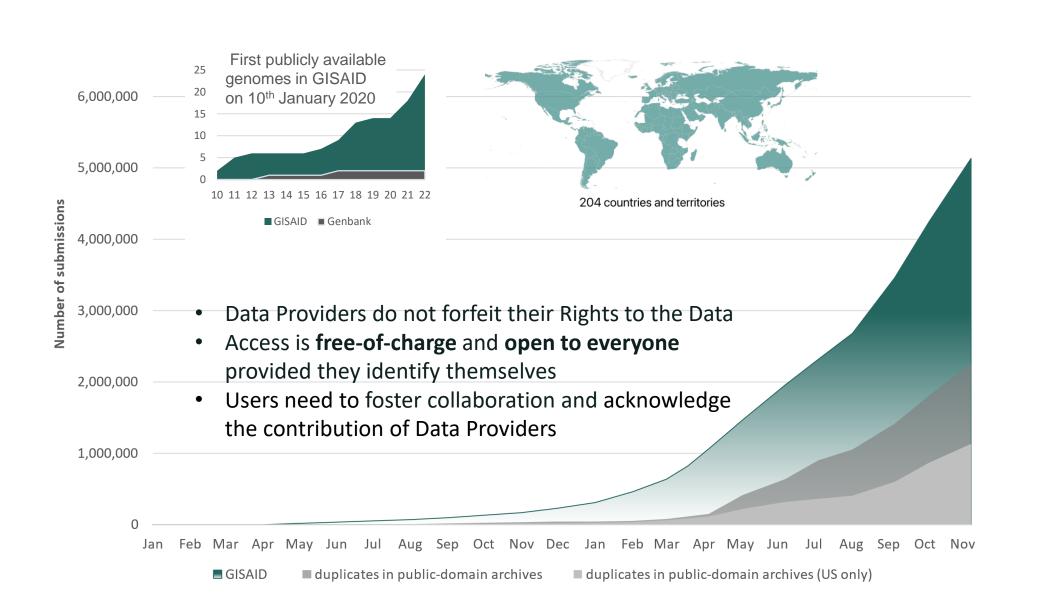


How a team at A*Star played a big role in global fight against Covid-19 pandemic



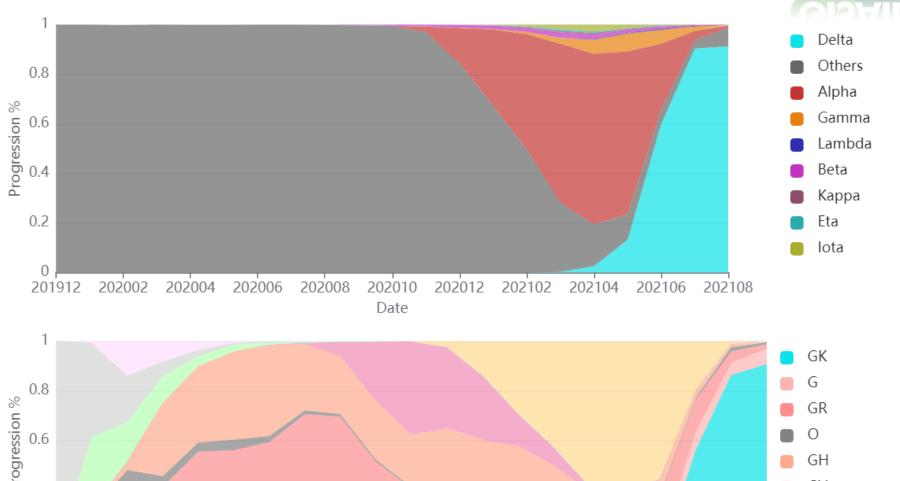
Real-time data sharing during the COVID-19 Pandemic => Trust

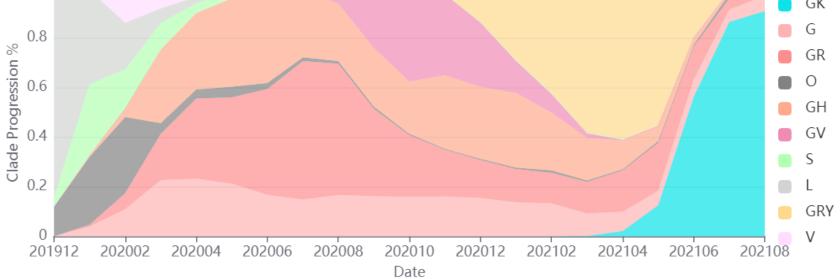
GISAID's transparent sharing mechanism vs. anonymous access public-domain



A virus always evolves through mutations...



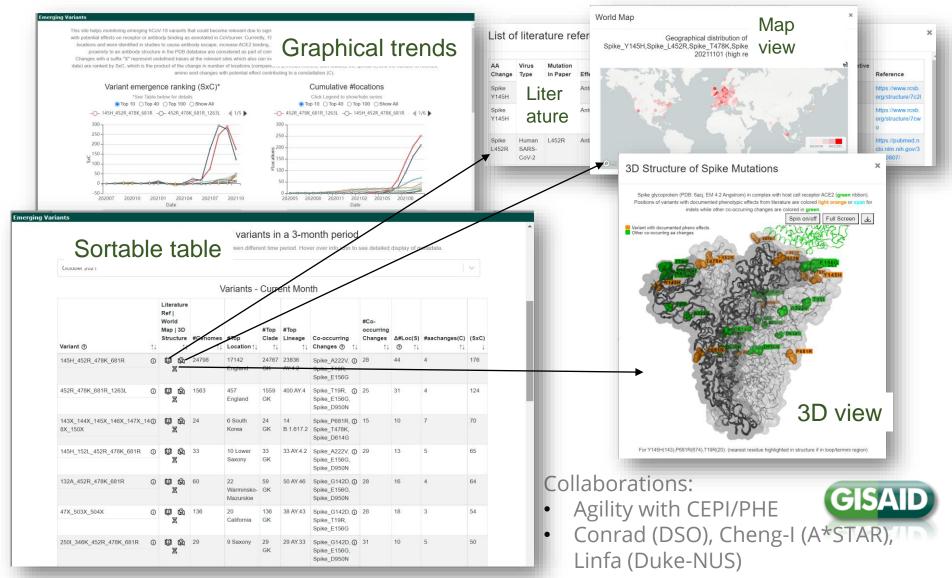




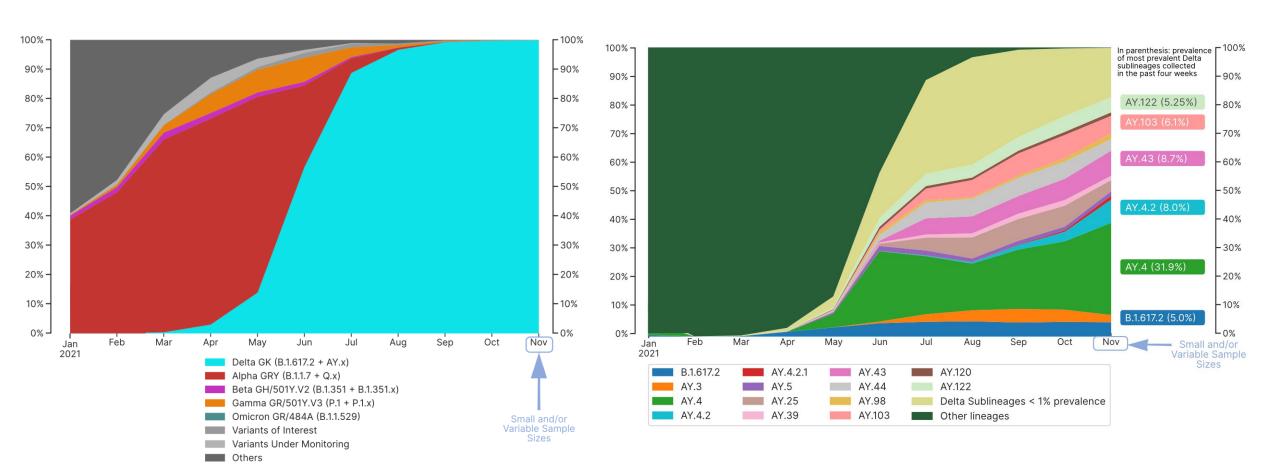
Live dashboard for choosing which emerging variants to investigate



- Fast spread (increase in observed locations)
- Number of relevant spike changes (with experimentally known effect or known Ab site)

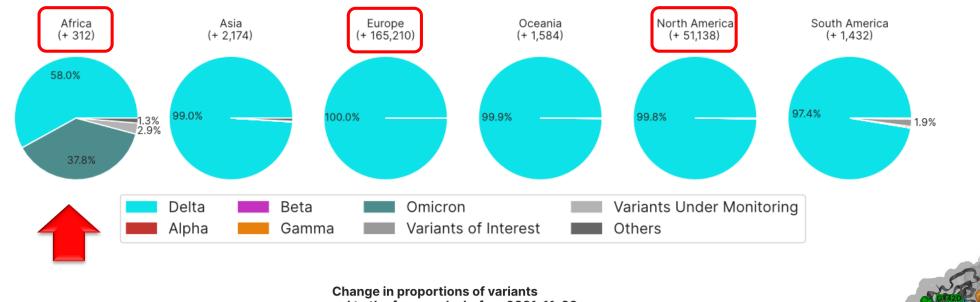


From Alpha to Delta to Omicron





Not absolute increase but regional increase identified Omicron (B.1.1.529 is not offspring of Delta)



compared to the four weeks before 2021-11-02

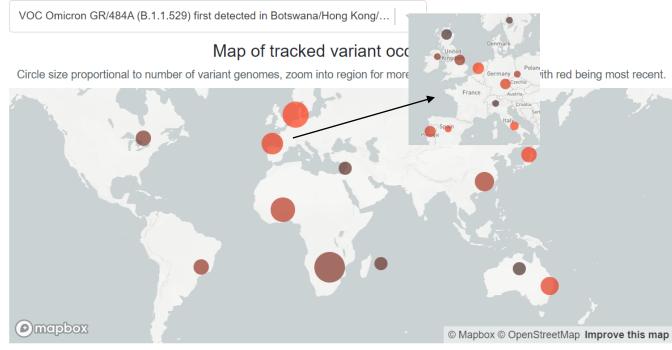
Delta	-37.7%	+0.1%	+0.1%	-0.1%	+0.2%	+2.2%
Alpha	+0.0%	-0.4%	-0.0%	+0.0%	-0.0%	-0.0%
Beta	-0.8%	+0.0%	-0.0%	+0.0%	-0.0%	+0.0%
Gamma	+0.0%	+0.0%	-0.0%	+0.0%	-0.0%	-1.9%
Omicron	+38.8%	+0.2%	+0.0%	+0.1%	+0.0%	+0.0%
Variants of Interest	+0.0%	+0.0%	-0.0%	+0.0%	+0.0%	-0.3%
Variants Under Monitoring	-1.0%	+0.0%	+0.0%	+0.0%	-0.0%	+0.0%
Others	+0.7%	+0.1%	-0.0%	+0.0%	-0.2%	+0.1%
	Africa	P.Sig.	Enobe	oceania	Kotti Anerica	South America
					HOTEL C	South

Changes in the **Omicron** spike glycoprotein: A67V, H69del, V70del, T95I, G142D, V143del, Y144del, Y145del, N211del, L212I, ins214EPE, G339D, S371L, S373P, S375F, K417N, N440K, G446S, S477N, T478K, E484A, Q493R, G496S, Q498R, N501Y, Y505H, T547K, D614G, H655Y, N679K, P681H, N764K, D796Y, N856K, Q954H, N969K, L981F

3D changes in receptor and antibody (vaccine) binding regions

Variant with documented pheno effects

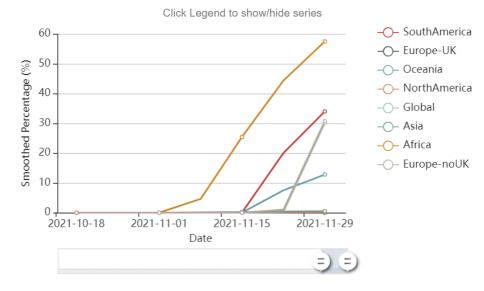
Variant (indels) with documented pheno effects
Variant without documented pheno effects



Most recent reported occurrences in different countries

Country	Strain Name	Collection Date
Belgium	hCoV-19/Belgium/ULG-22181/2021	2021-11-29
Italy	hCoV-19/Italy/CAM-COLLI-COTUGNO-A10117/2021	2021-11-28
Japan	hCoV-19/Japan/IC-2278/2021	2021-11-28
Spain	hCoV-19/Spain/MD-HGUGM-5821169/2021	2021-11-28
Australia	hCoV-19/Australia/NSW-ICPMR-14637/2021	2021-11-28
Austria	hCoV-19/Austria/MUIV-0231/2021	2021-11-28
Portugal	hCoV-19/Portugal/PT21719/2021	2021-11-27
Germany	hCoV-19/Germany/BY-MVP-000009711/2021	2021-11-27
Netherlands	hCoV-19/Netherlands/NH-RIVM-71084/2021	2021-11-26
Ghana	hCoV-19/Ghana/TRA-2339/2021	2021-11-26

Relative Variant Genome Frequency per Region (exponentially smoothed alpha=0.3)



Country Submission Count

Country	Total #GR/484A (B.1.1.529)	#GR/484A (B.1.1.529) in past 4 weeks	%GR/484A (B.1.1.529) in past 4 weeks
South Africa	172	172	71.4
Ghana	33	33	62.3
Botswana	19	19	22.4
United Kingdom	18	18	0.0
Netherlands	13	1	0.0
Portugal	13	13	1.3
Hong Kong	7	7	29.2
Australia	6	6	0.4
Germany	5	5	0.1
Italy	4	4	0.1

Phylodynamics of Omicron (genetic divergence)

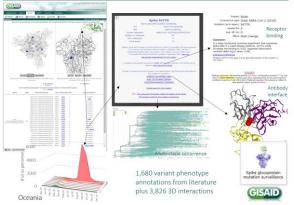
> VOC Omicron GR/484A (B.1.1.529) first detected in Botswana/Hong Kong/South Africa Showing 304 of 304 genomes collected between Nov 2021 and Nov 2021, last updated 2021-12-01 S: Y796D, K856N, D950N, H9540 hCoV-19/Botswana/R43B70_BI S: K969N, F981L Phylogeny hCoV-19/Italy/LOM-Sacco_Var_T96348/2021 hCoV-19/SouthAfrica/CERI-KRISP-K032246/2021 Country > orf1ab: L6924F hCoV-19/SouthAfrica/CERI-KRISP-K032214/2021 hCoV-19/SouthAfrica/CERI-KRISP-K032219/2021 nCoV-19/SouthAfrica/CERI-KRISP-K032189/2021 hCoV-19/SouthAfrica/CERI-KRISP-K032239/2021 hCoV-19/SouthAfrica/CERI-KRISP-K032238/2021 0.00010 0.00015 0.00020 0.00025 0.00030 Divergence S: K764N orf1ab: V1887 orf1ab: T1822 S: K440N, S4460 S: N417k 0.00005 0.00010 0.00015 0.00020 0.00025 0.00030 Divergence



Real-Time Surveillance of Virus Variants

- Trusted sharing platform
- Real-time genomic surveillance
- The right analysis tools



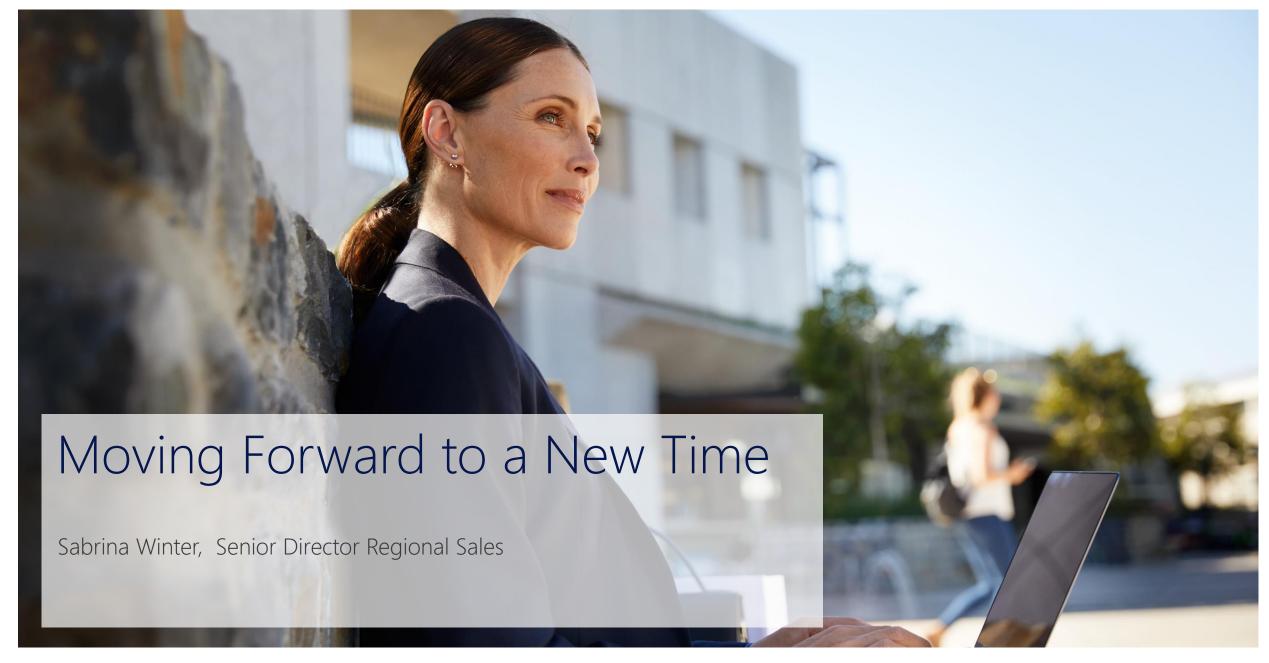


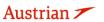


Thank You!

















Restarting global travel

Current situation

Fear of new COVID variants

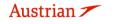
Slower than expected vaccination

Worsening border restrictions impacting international travel

Worsening domestic situation

Vaccine hesitancy

Source: 25-2122_2021 10 26 IARA Presentation to BAR Singapore



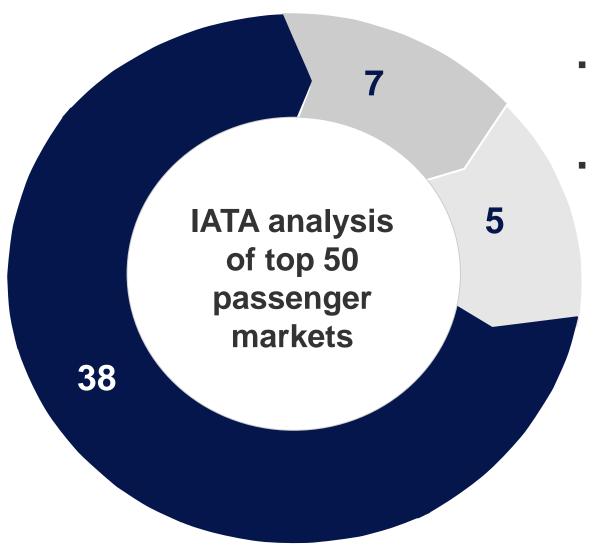








Unharmonized border measures



- Lack of harmonized border measures, restrictions and procedures is a major cause of the failure to restart travel
- Analysis of 50 largest air travel markets shows significant variations in border entry requirements:
 - No restrictions
 - Open but potential for quarantine
 - Various entry restrictions

Source: 25-2122_2021 10 26 IARA Presentation to BAR Singapore











Advocacy for Safely Reopening Borders

Engagement with Governments on 4 key areas:



Source: 25-2122_2021 10 26 IARA Presentation to BAR Singapore











Stronger together: The leading European airline group

19.6 Mio. **Passengers** July, August and September 2021







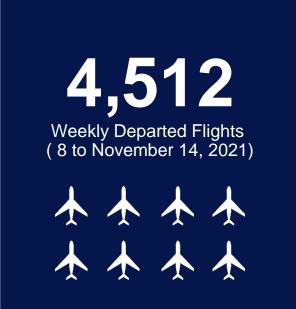




260 global destinations (Lufthansa Group)







68.8% **Seat load factor** (Q3 2021)



in order (long-haul)













Southeast Asia and Pacific Development – focus on restart





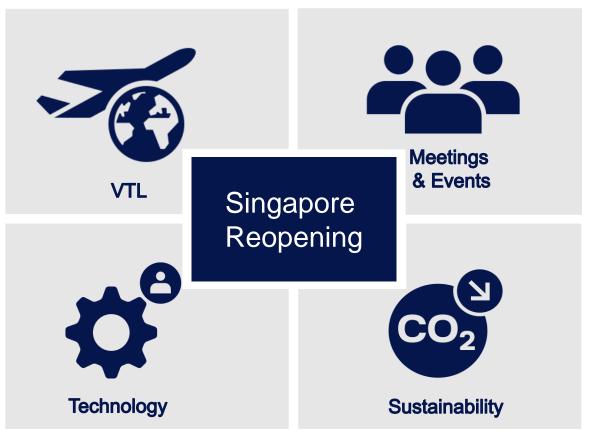




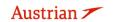




Singapore - The way forward

















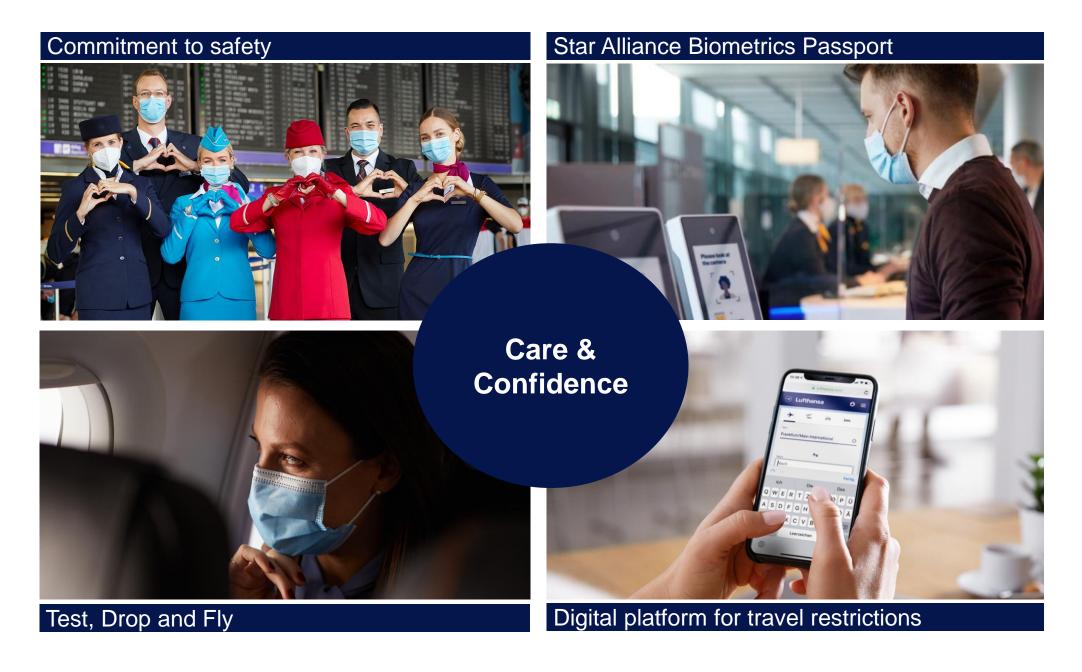


















#MakeChangeFly - Pioneering Sustainable Aviation



1955 Noise Reduction at engine test facilites in HAM



1994 1st Airline with Corporate Responsibility Reporting



2007 Start Compensation Program



2011 World's first long-term test of SAF in regular operations



2019 1st Airline to offer SAF to all customers



2021 Intermodality Push 22 Destinations in DE



2022 SharkSkin on **B777F Fleet**



NetZero

2050











SAF (Sustainable Aviation Fuel)





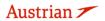




















The Singapore Economic Development Board (EDB)

What We Do: EDB is Singapore's lead agency that plans and executes economic and industrial development strategies for Singapore

OUR VISION

- A Global Leader
- A Great City
- A Home in Asia
- For Business, Innovation, and Talent

OUR MISSION

We create for Singapore, sustainable economic growth with vibrant business and good job opportunities



Responsible for >30% of Singapore's Annual GDP

EDB undertakes <u>investment</u>
<u>promotion</u> and <u>industry development</u>
in the manufacturing and tradeable
services sectors.

- Facilitate investments
- Partner existing base to transform and boost productivity
- Support corporate entrepreneurships and growth of new ventures



The Economy of Singapore Today









A Global Leader for Business Growth and

Transformati

INNOVATION





DIGITAL

Asia's top-ranked country in digital transformation, and 1st in digital infrastructure.

(Source: Asian Digital Transformation Index 2018)



ADVANCED MANUFACTURING

4th largest exporter of high-tech goods globally, in terms of value-add.

(Source: World Bank Data)



HUB SERVICES

46% of Asia RHQs are based in Singapore, across a diverse range of industries.

(Source: Singapore Business Review, as quoted in KPMG, "Budget 2018/2019 Report")



SUPPLY CHAIN & CONNECTIVITY

2nd busiest container sea port and 12th busiest air cargo hub in the world.

(Source: Lloyd's List 2017 – Top 100 Container Ports 2017; Airports Council International - World Airport Traffic Report 2018)



ELECTRONICS

Accounts for 25% of global semiconductor equipment output in 2017.

(Source: SEMI Global Industry Association)



AEROSPACE

#1 aerospace city of the future globally.

(Source: fDi's Aerospace Cities of the Future 2018/19)



ENERGY & CHEMICALS

Top 5 largest refinery export hub globally.

(Source: BP Statistical Review of World Energy 2019)



MARINE & OFFSHORE

Top maritime capital of the world.

(Source: Leading Maritime Capitals of the World Report, 2019)



Success stories from the DACH Region

ALPLA APAC HQ- HQ:AUT

Global plastics packaging recycler.

- Established APAC RHQ in Singapore in 2021 as part of restructuring plans to merge North and Southeast Asia into one region.
- Transparency and safe legal environment cited as key reasons for establishing RHQ.
- In addition, Singapore also has a conducive ecosystem comprising brand owners, dynamic start-up scene, R&D landscape and talent pool.

Bühler + Givaudan Food
Innovation Centre - HQ:CH

Factory equipment manufacturer and Flavors & Fragrance maker.

- New 4,000 sqft innovation center to help researchers, food manufacturers and start-ups to develop, test and scale up plant-based food products.
- Support of food and machine experts such as marketing specialists, process technologists and food scientists.
- Singapore's vibrant food technology scene and cultural diversity make it an ideal location to drive food innovation with partners.

SYNTELLIX- HQ:DE

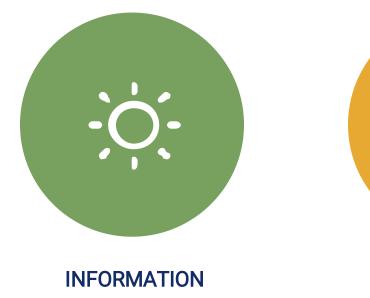
Global market leader in bioabsorbable metallic orthopaedic implants

- Established RHQ in Singapore in 2016, to oversee subsidiaries in the region.
- Set up in 2019, Singapore is Syntellix's only manufacturing site & R&D Hub outside home base of Hannover. It is currently expanding capacity and further integrating the site in its global value chain.
- Chose Singapore for its top-notch healthcare ecosystem, academic infrastructure and high level of governance, transparency and compliance.



Welcome to Singapore

How can EDB support companies on their investment journey in Singapore



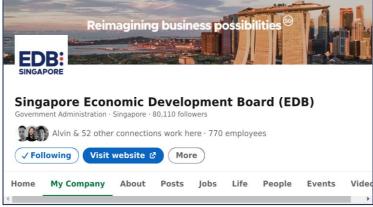






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Receive latest stories and analyses on how companies are growing in Asia. You also gain exclusive access to event invitations and promotions.









Thank you





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