ICMART PRELIMINARY WORLD REPORT 2021

ESHRE, Paris, France
June 29 – July 2, 2025

ICMART is a non-State actor in official relations with the World Health Organization.

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Disclosures

The authors declare that they have **no commercial or financial interest** pertaining to the subject of this presentation or its content.

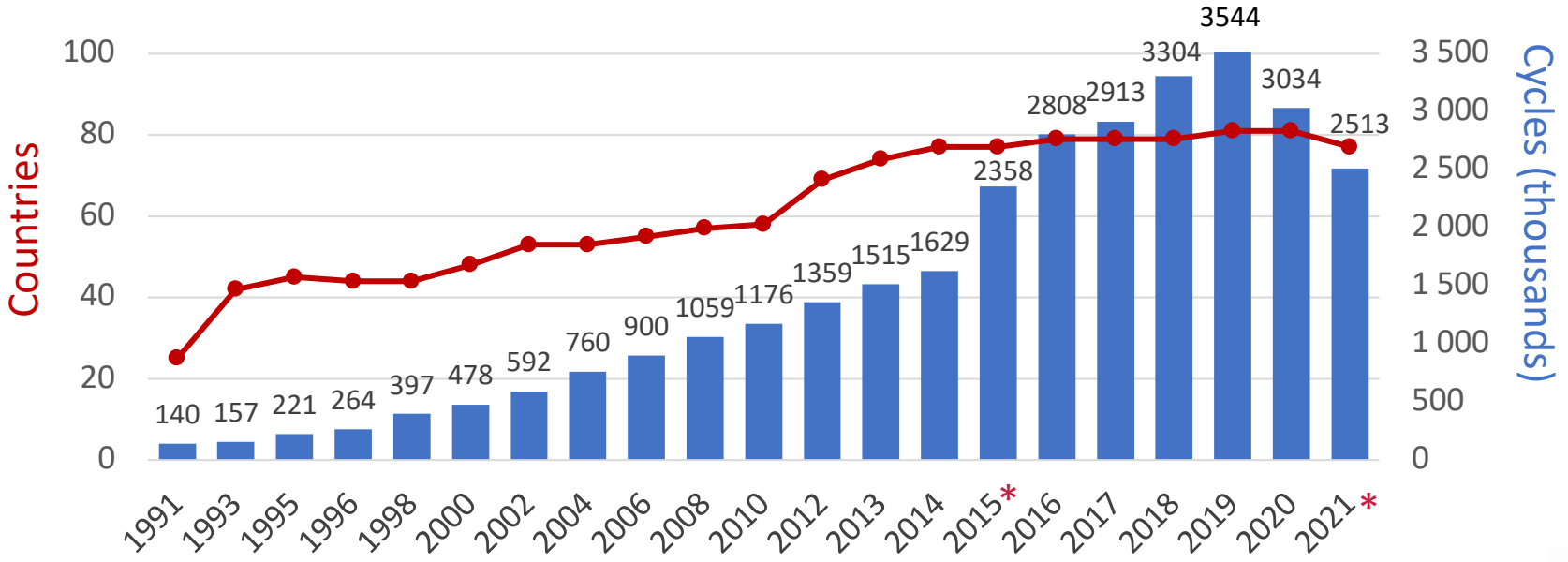
Partnership

The National Perinatal Epidemiology and Statistics Unit of the University of New South Wales is the Data Custodian of the ICMART World Registry and collects and analyses the data presented in the World Reports in partnership with ICMART.

ICMART also expresses its appreciation to the University of Cape Town for its contribution to data collection and analysis as Clinical Data Director.

ICMART World Registry: 1991 – 2021

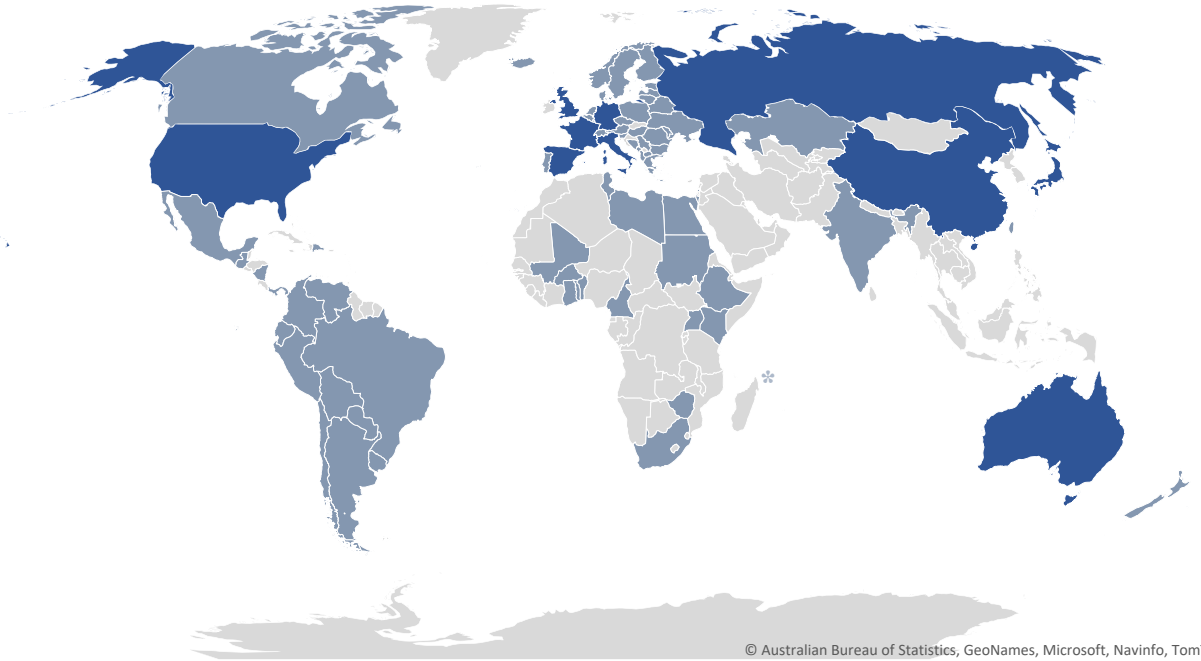
2,512,989 **reported** cycles from 77 countries (- 17.2%)
475,018 reported babies (-31.8%)



*China commenced reporting to ICMART; *No data from China

ICMART Contributors 2021

77 countries, 2927 clinics



Leading countries

Japan	494,707
USA	341,985
Russia	151,748
Spain	139,864
France	125,659
Germany	118,832
Italy	94,179
Australia	85,402
Taiwan	57,266
Greece	50,491

73.9%
of cycles

Countries not reporting: China, India, UK, Israel

Covid-19: Regional impact and recovery

Region	Reported cycles 2021	Change (%) 2019 to 2020	Change (%) 2020 to 2021
Africa	45,541	-18.8%	+20.7%
Asia (excl. China & India)*	565,060	-3.3%	+15.1%
Australia-New Zealand	93,127	+7.4%	-0.5%
Europe	1,071,575	-15.2%	+23.0%
Latin America	93,675	-22.9%	+45.7%
North America	376,040	-2.3%	+25.6%

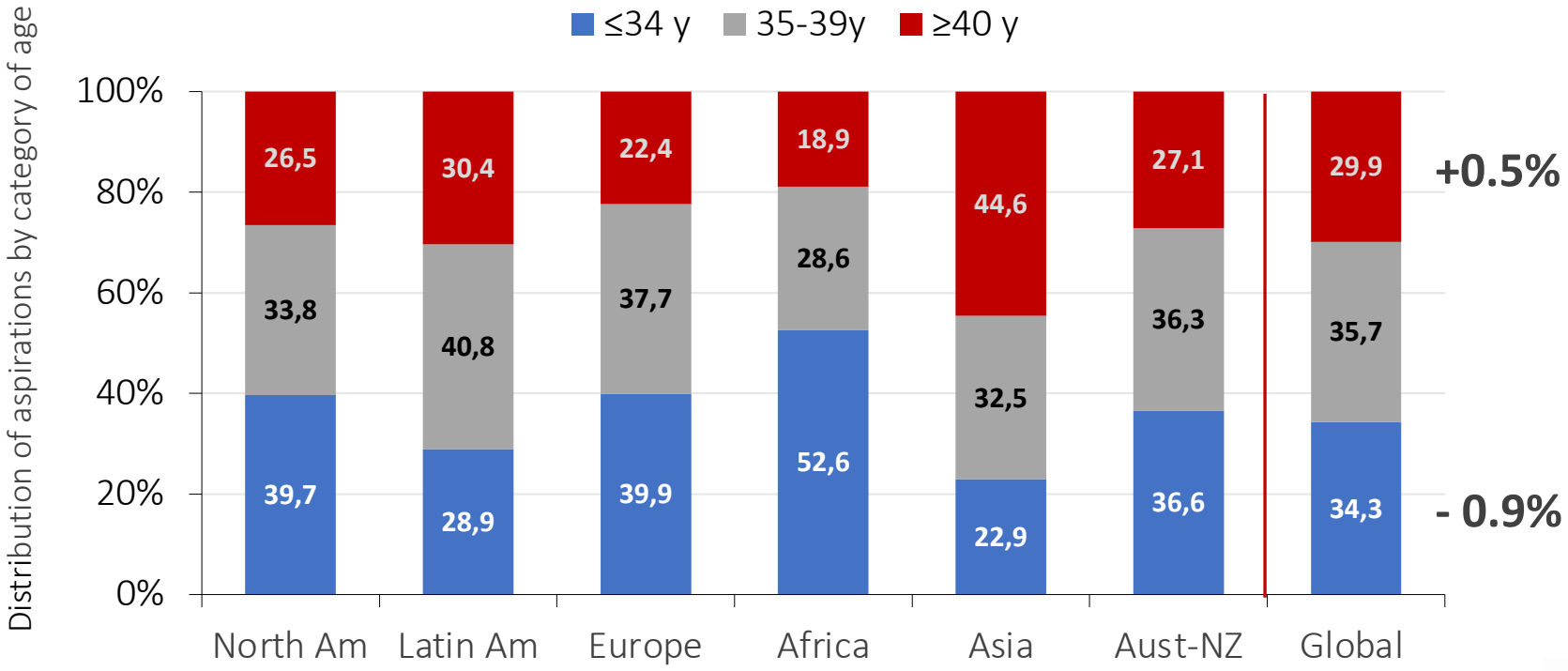
* For accurate comparison, India and China excluded due to inconsistent reporting

2021 Overview: Effectiveness

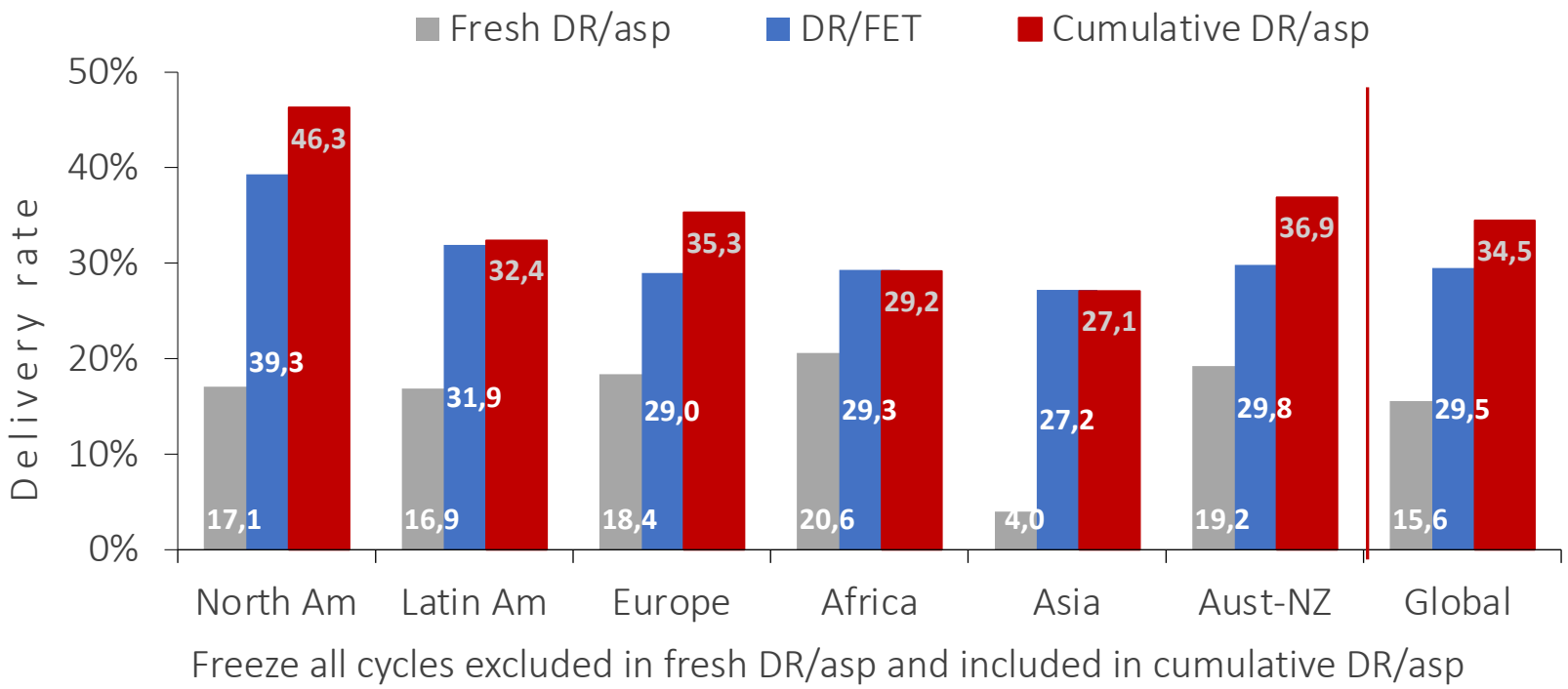
PROCEDURES	N	DELIVERY RATES[1]
Autologous IVF & ICSI aspirations	1,130,390	15.6% per asp
Freeze All cycles	270,240	
Fertilisation by ICSI	72.6%	
Autologous fresh transfers	415,208	25.7% per ET
Frozen embryo transfers	811,431	29.5% per ET
PGT transfers	154,961	48.3% per ET
Egg donation transfers (fresh and frozen)	227,908	35.4% per ET

1. Excluding countries not reporting deliveries (n=9) and freeze all cycles from DR/asp

Autologous ART 2021: Aspirations by Age



Autologous ART 2021: Delivery Rates

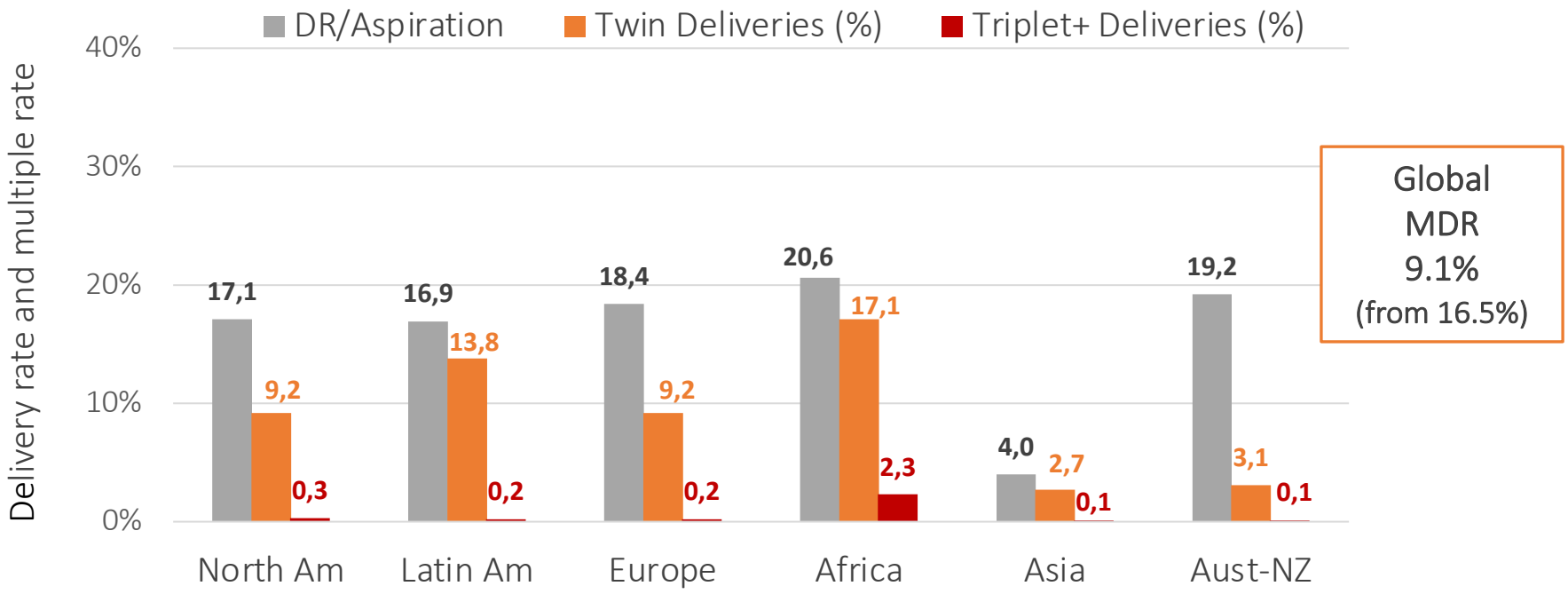


Freeze all cycles excluded in fresh DR/asp and included in cumulative DR/asp

Asp=aspiration; DR=delivery rate; FET=frozen embryo transfer

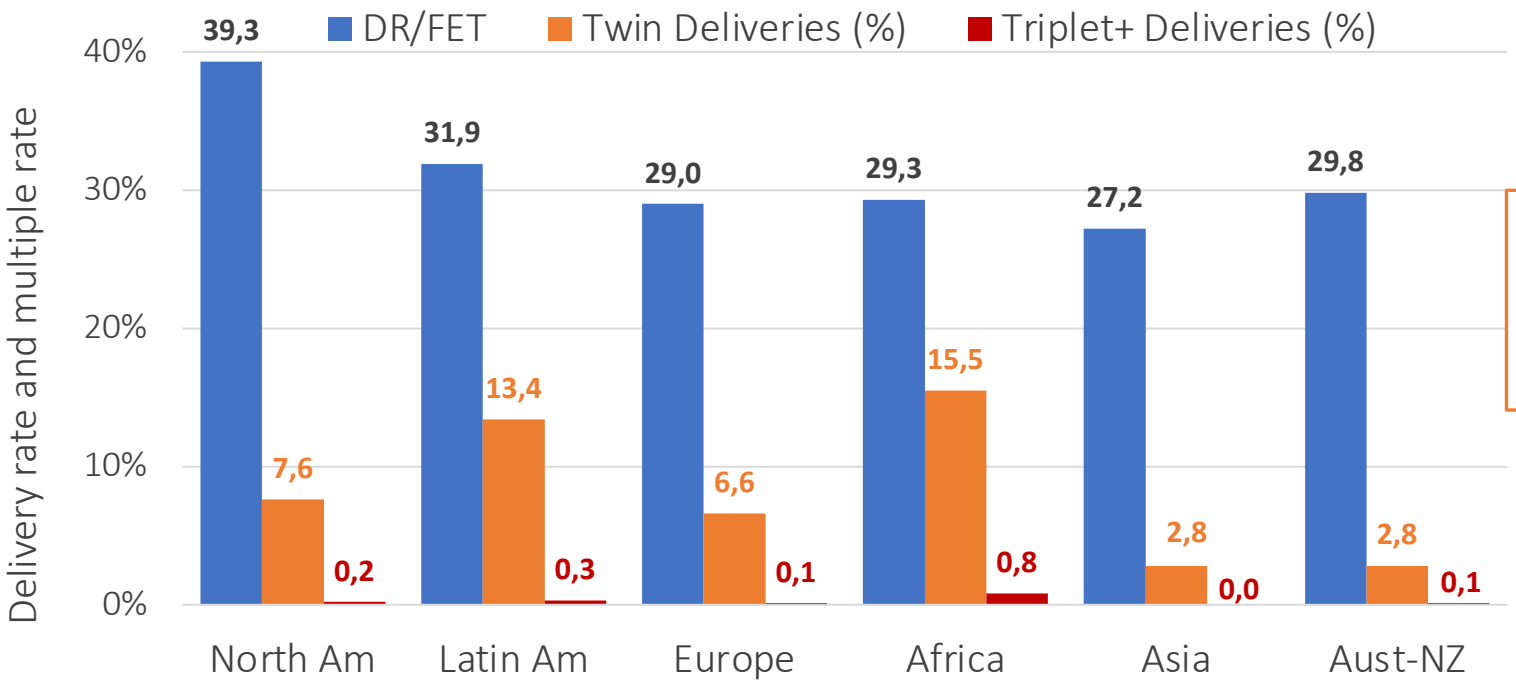
Autologous ART 2021

Fresh transfers: DR per aspiration & Multiple Rates



DR=delivery rate; MDR=multiple delivery rate

Autologous ART 2021:
Frozen thawed transfers: DR and Multiple Rates

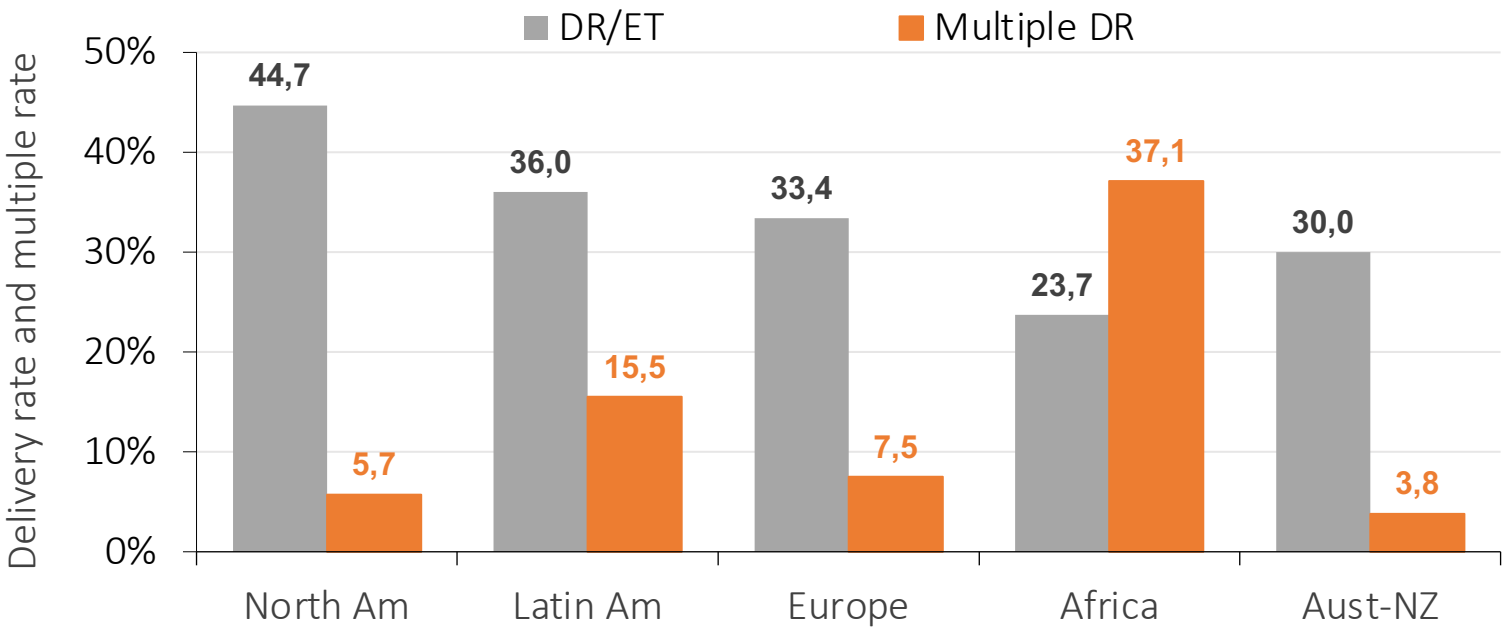


Global MDR 5.8% (from 12.1%)

DR=delivery rate; FET=frozen thawed embryo transfer; MDR=multiple delivery rate

Oocyte Donation 2021: DR/ET and Multiple Rates

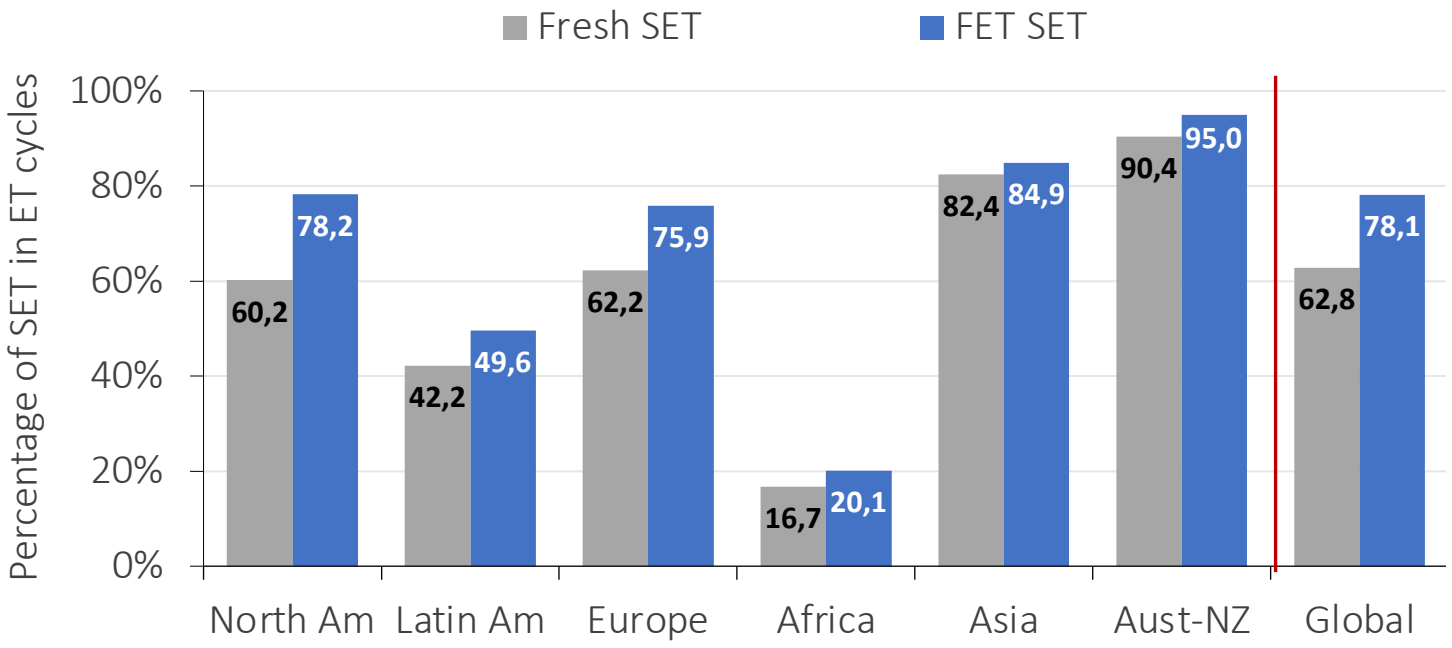
Fresh & frozen transfers



Global MDR 8.7% (from 9.5%)

DR=delivery rate; ET=embryo transfer; MDR=multiple delivery rate

Autologous ART 2021:
Proportion of SET in Fresh vs Frozen Cycles



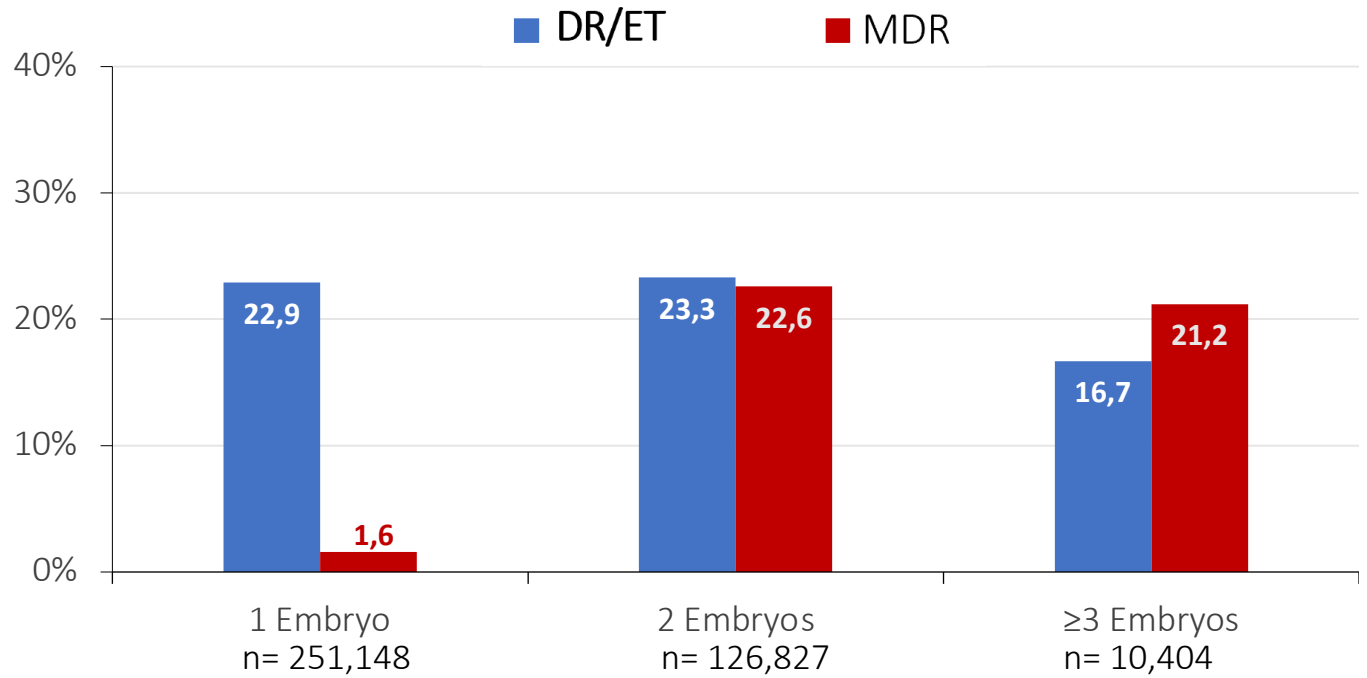
Fresh SET
+2.9%

FET SET
+1.8%

SET=Single embryo transfer; FET=Frozen thawed embryo transfer

Autologous ART 2021: Fresh Transfer Effectiveness

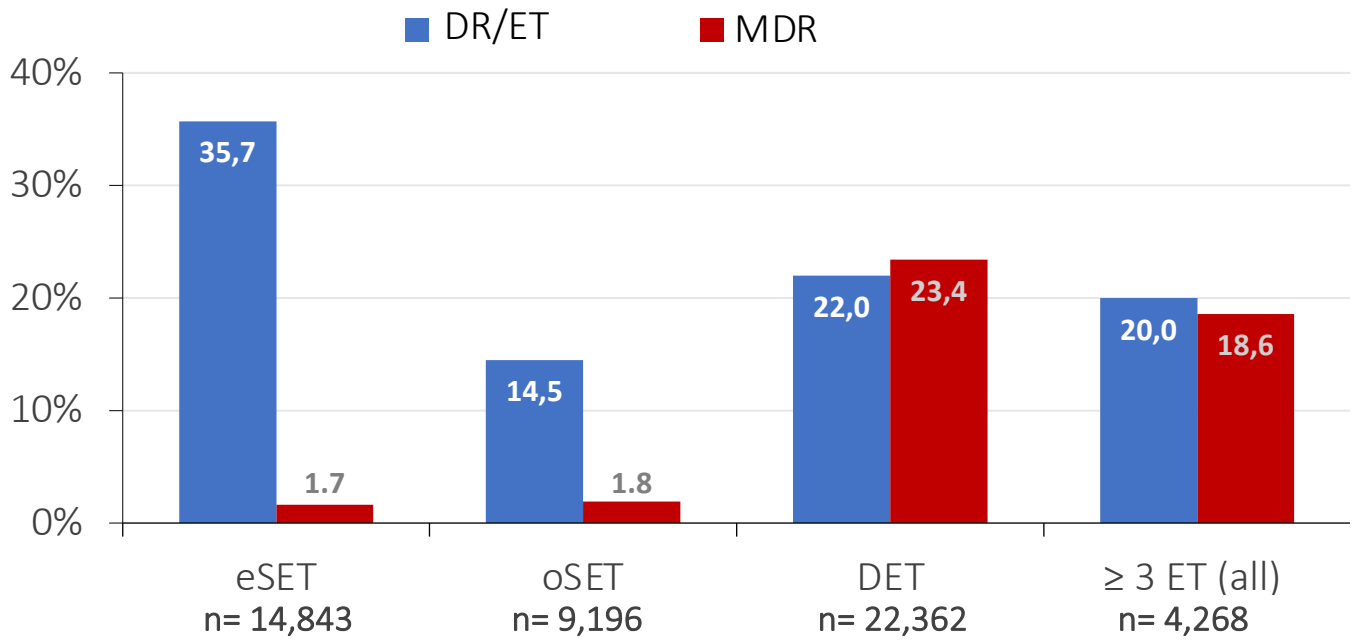
Aggregated data by **number of embryos** transferred



DR=delivery rate; ET=embryo transfer; MDR=multiple delivery rate; n=number of transfers

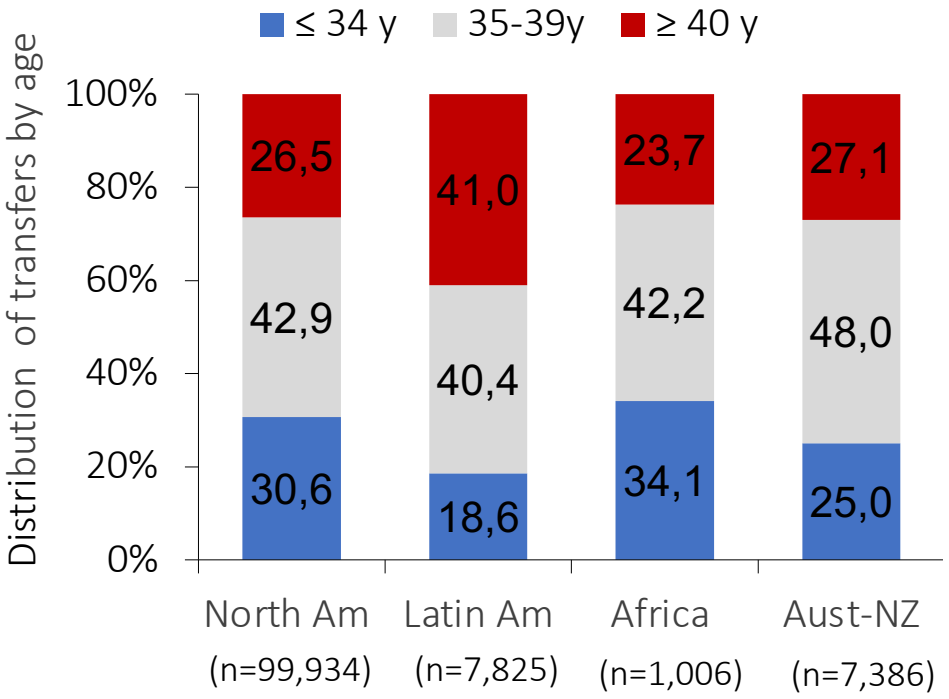
Autologous ART 2021: Elective vs. Non-elective SET

32 Countries with disaggregated data



eSET=elective single embryo transfer; oSET=non-elective single embryo transfer; DET=double embryo transfer

PGT-A 2021: Distribution by age and DR per ET

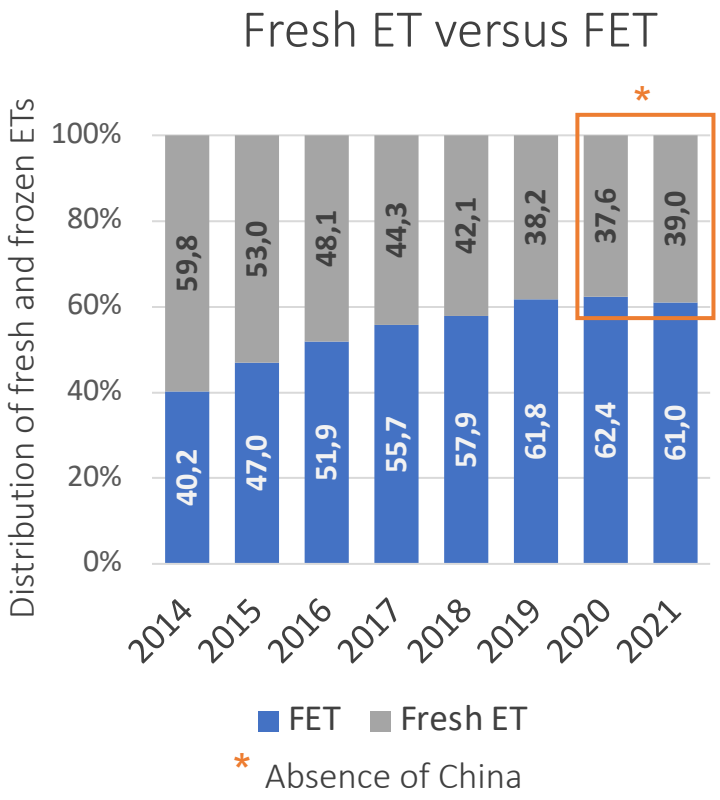


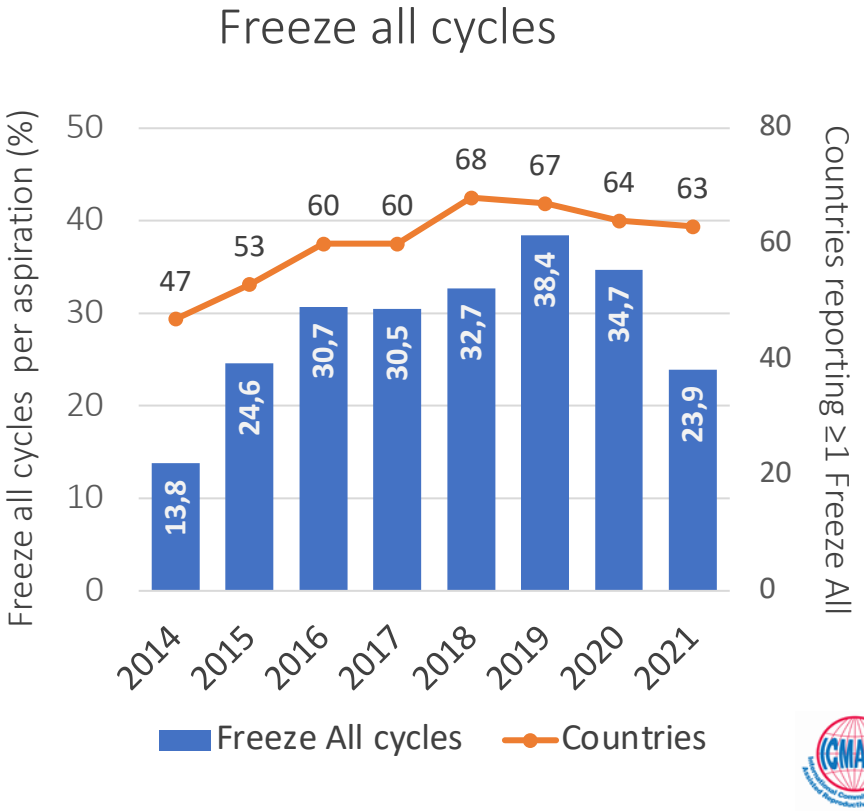
	DR/ET
≤ 34	53.0%
35-39	50.6%
≥ 40	47.5%
Total*	48.3%

(n=148,893 transfers; +20.4%)

* Including Europe with all PGT combined

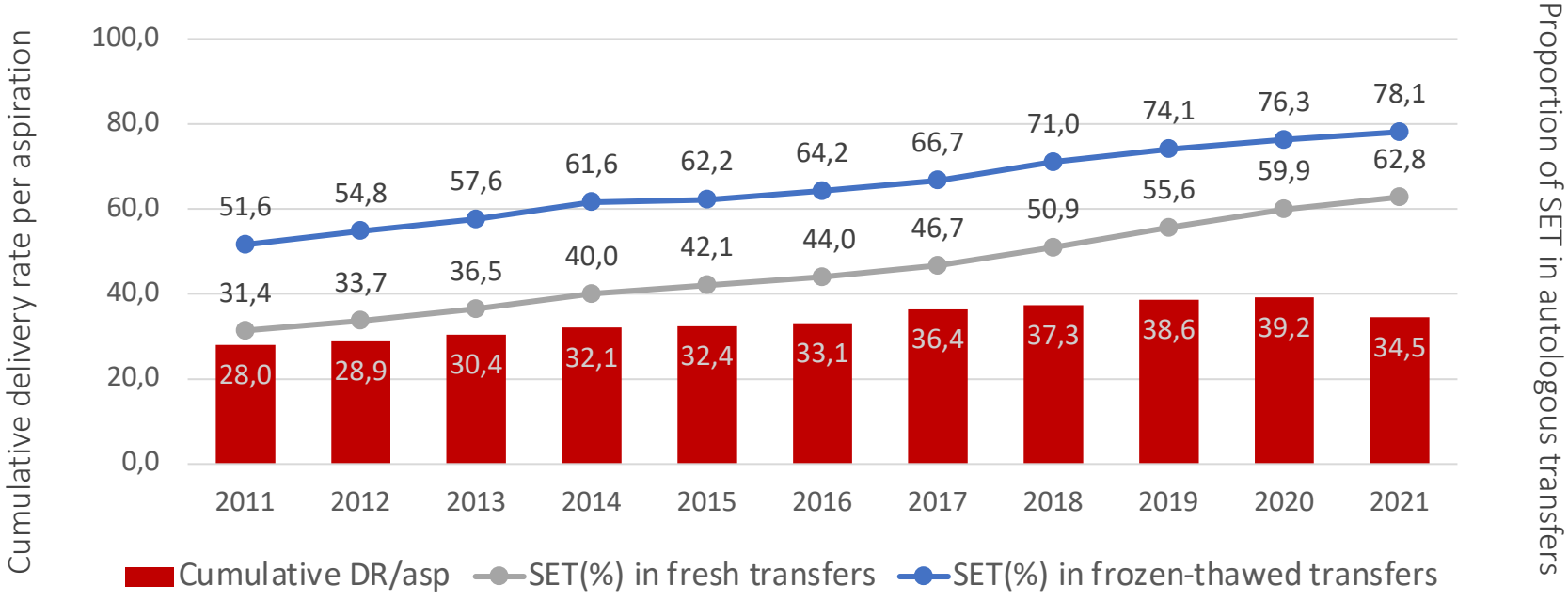
Trends: Autologous Cryopreservation





Trends: SET in autologous cycles

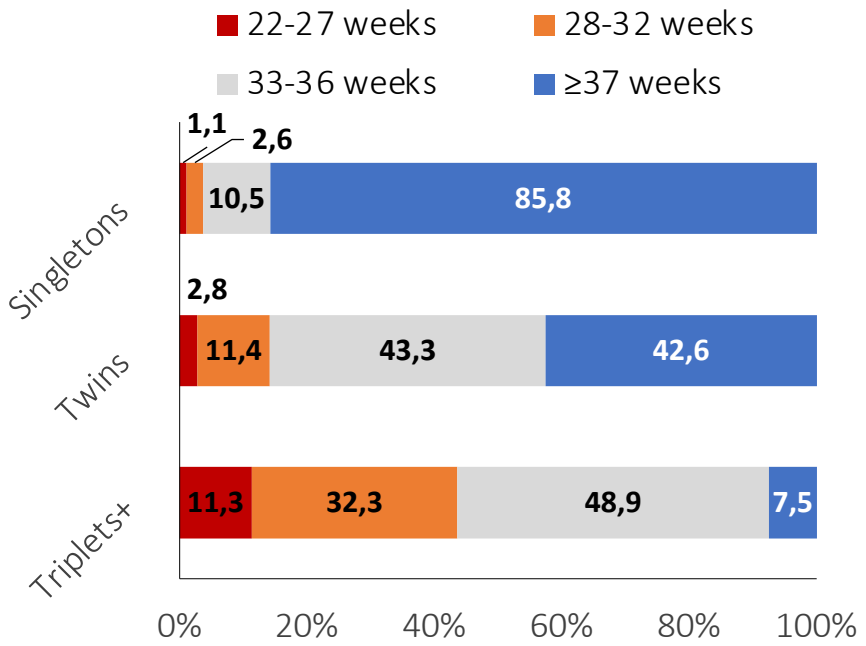
Proportion of SET transfers and cumulative delivery rates



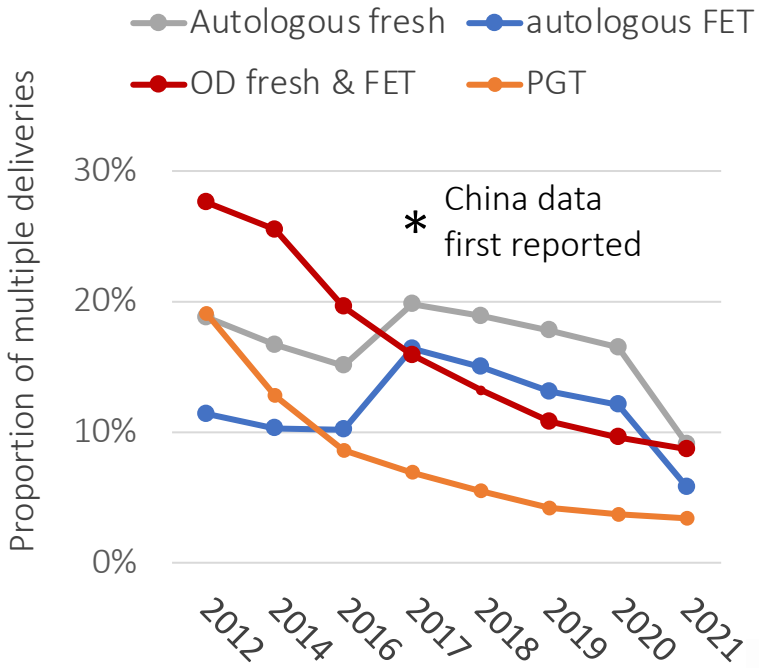
Asp=aspiration; DR=delivery rate; SET=single embryo transfer

Trends: Multiple Rates and Prematurity, 2021

Fresh autologous ART, 2021



Multiple rates by type of procedure



How many infants have been born with the help of assisted reproductive technology?

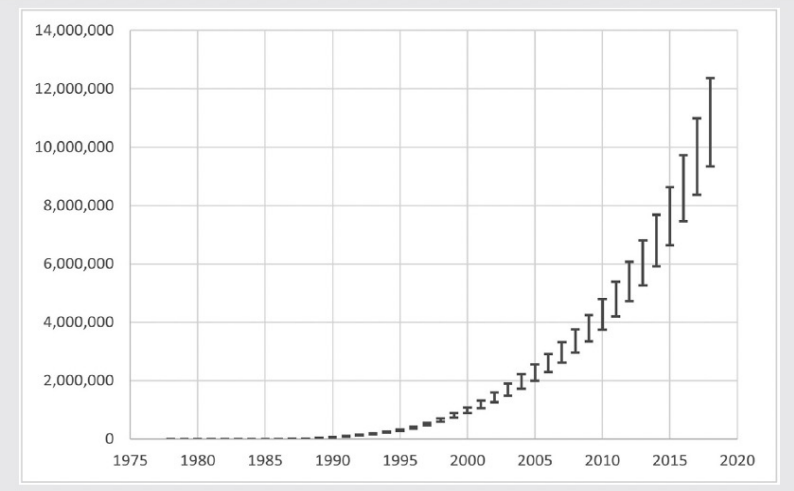
G. David Adamson, M.D.,[a,b] Prudence Creighton, M.Stat.,[c] Jacques de Mouzon, M.D., M.P.H.,[d] Fernando Zegers-Hochschild, M.D.,[e] Silke Dyer, M.D.,[f] and Georgina M. Chambers, Ph.D.[c]

9,829,668

Lower range estimate

13,019,331

Upper range estimate



Cumulative number of ART - conceived infants born globally, upper and lower range estimates

Adamson et al, Fertil Steril 2025; doi.org/10.1016/j.fertnstert.2025.02.009

How many infants have been born ?

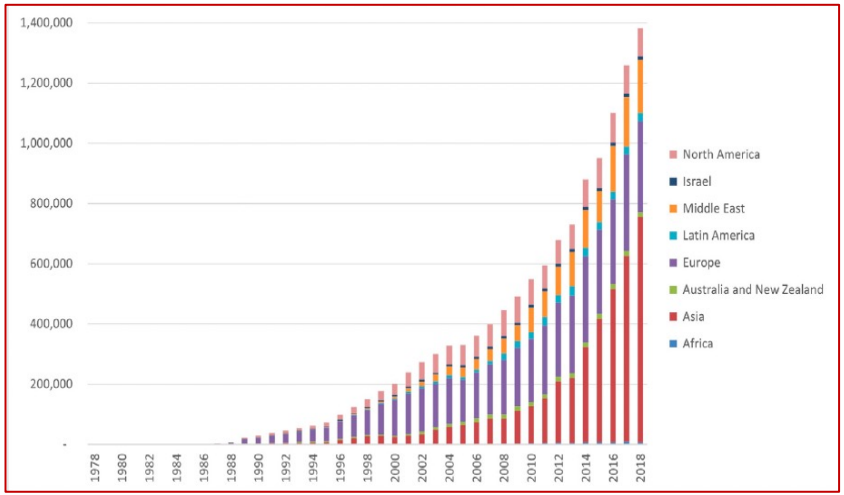
1978 to 2018

1,218 unique data submissions

101 countries

Deliveries derived from complex analysis based on

- Reported & estimated pregnancies in reporting countries
- Age-specific pregnancy loss rate
- Adjusted for multiple births



Cumulative number of ART - conceived infants by region, upper range estimates

Adamson et al, Fertil Steril 2025; doi.org/10.1016/j.fertnstert.2025.02.009

Thank you to our Contributors

ANARA (Africa), 14 countries: Cameroon, Egypt, Ethiopia, Ghana, Ivory Coast, Kenya, Mali, Mauritius, Nigeria, South Africa, Togo, Tunisia, Uganda, Zimbabwe

ANZARD, 2 countries: Australia, New Zealand

ASIA, 4 countries: India (estimates only), Indonesia, Japan, Nepal, Taiwan

EIM (ESHRE), 38 countries: Albania, Armenia, Austria, Belarus, Belgium, Bosnia, Bulgaria, Croatia, Czech Rep, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Kazakhstan, Kosovo, Latvia, Lithuania, Luxembourg, Macedonia, Montenegro, Netherlands Norway, Poland, Portugal, Russia, Serbia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine

NORTH AMERICA, 2 countries: Canada, United States

REDLARA (Latin America), 16 countries: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Mexico, Panama, Paraguay, Peru, Uruguay, Venezuela

Thank You to our Sponsoring Organizations

Thank you to all

who placed themselves into the care of ART centres in 2021

https://www.icmartivf.org