UK Screening programmes

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Disclosures

Fees paid to my institution:

Sanofi: Consultancy and speaker fees, support for meeting travel

Lilly: Consultancy fees

Abbott: Consultancy fees

UK general population screening programmes

ELSA

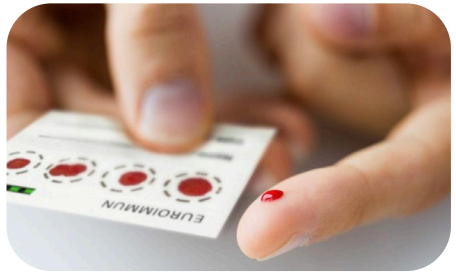
Age 3-13 *(2-17 in early 2026)*

Feasibility and acceptability

T1DRA

Age 18-70

Natural History



ging Education Interview Monitoring Clinical trials

Study End Study End

Figure created using Canva: https://www.canva.com/

RSR-3 screen: GAD, IA2, ZnT8

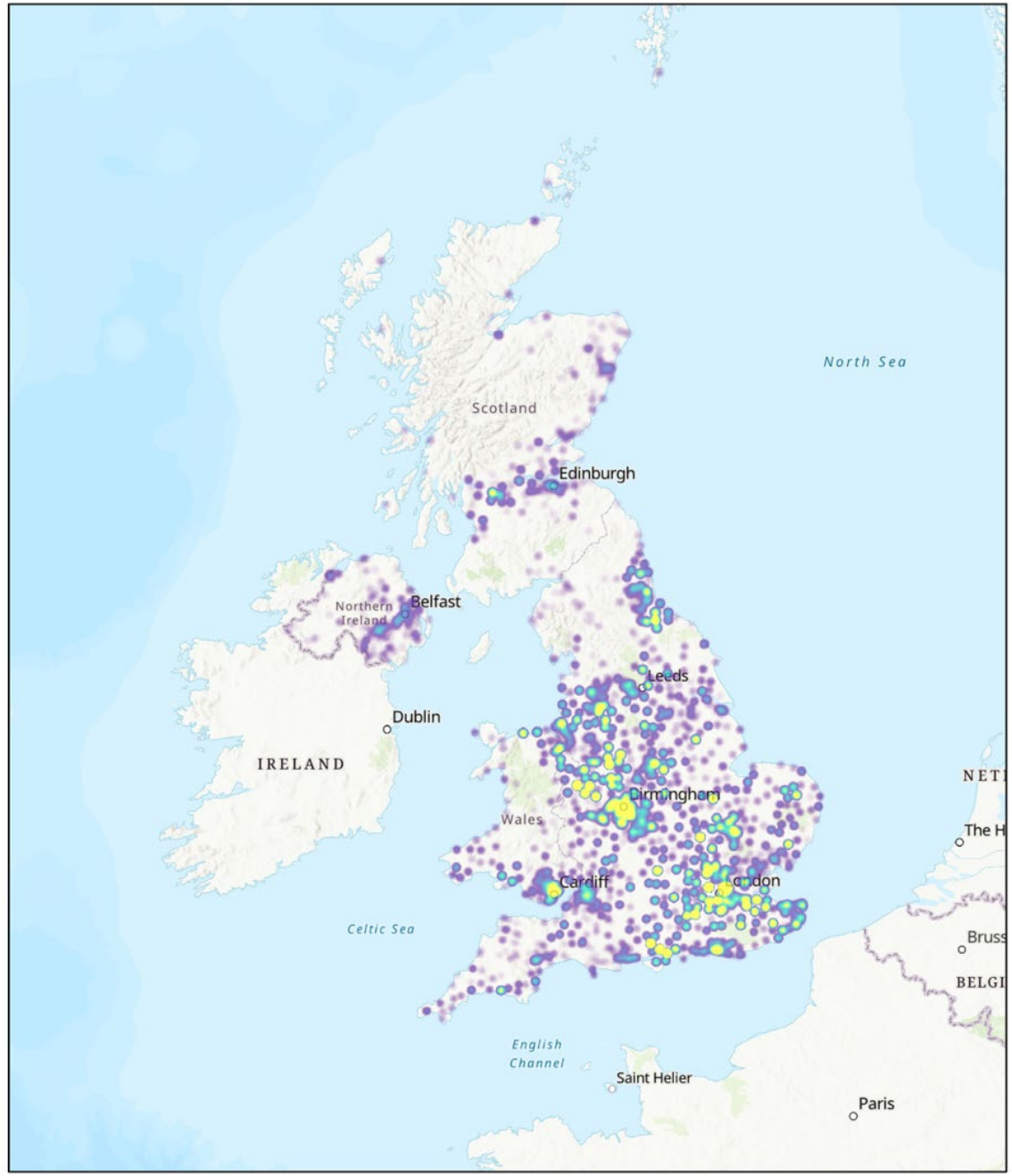
GAD, IA2, ZnT8, + IAA

GP informed SNOMED code

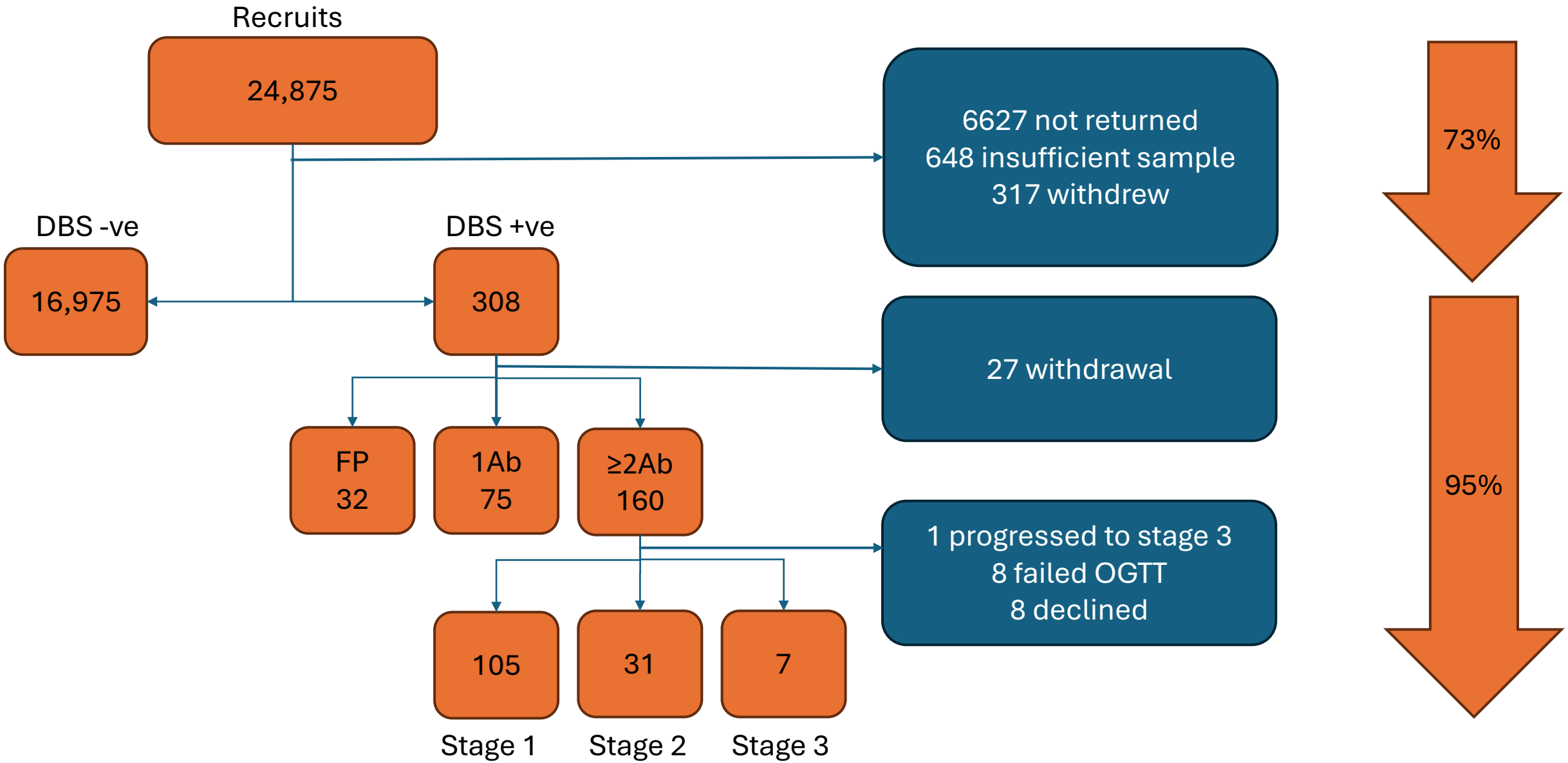
INNODIA
A PRIVATE PUBLIC PARTNERSHIP AGAINST TYPE 1 DIABETES

UKT1D Research Consortium

For people At Risk of Autoimmune Diabetes
ARAD


North Sea
Scotland
Edinburgh
Northern Ireland
Belfast
Leeds
Dublin
IRELAND
Birmingham
Wales
Cardiff
Celtic Sea
English Channel
Saint Helier
Paris

ELSA Consort diagram WDD 2022- WDD 2024



Dried blood spot testing followed by confirmatory testing at local sites is both feasible and acceptable

Feasibility

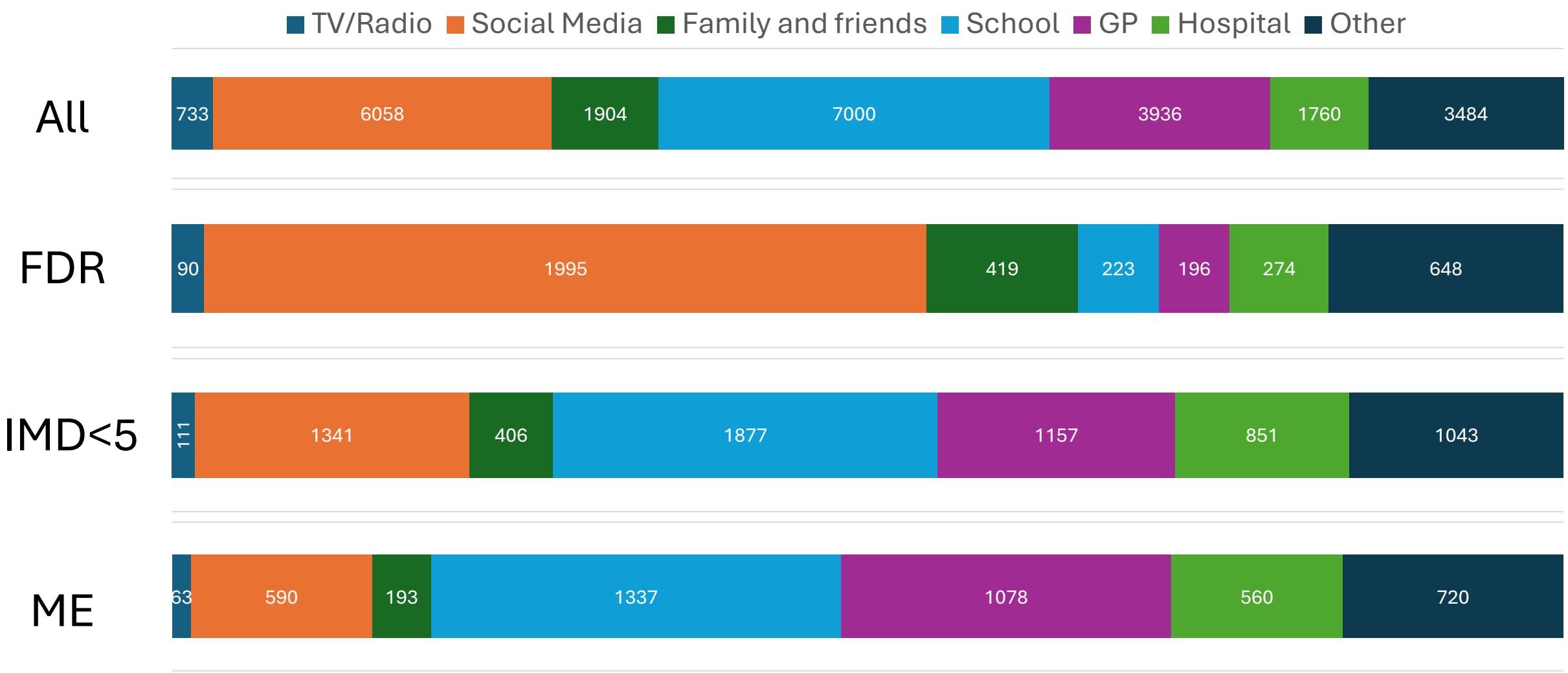
- 73% DBS return rate
- 95% of DBS positive proceeded to confirmatory testing and staging
- 85% completed education follow-up

Acceptability

98% found the screening acceptable, positive experience, would recommend

- High satisfaction
- Overall, easy, convenient process
- Trusted the study
- Benefit and process acceptable regardless of screening outcome (DBS positive or negative)
- Grateful for opportunity to take part and receive child's risk status
- Highly recommend

Where did you hear about the study?



Adverse events generally felt to be acceptable

DBS negative

No lasting impact

Worst parts were the DBS and the wait for results

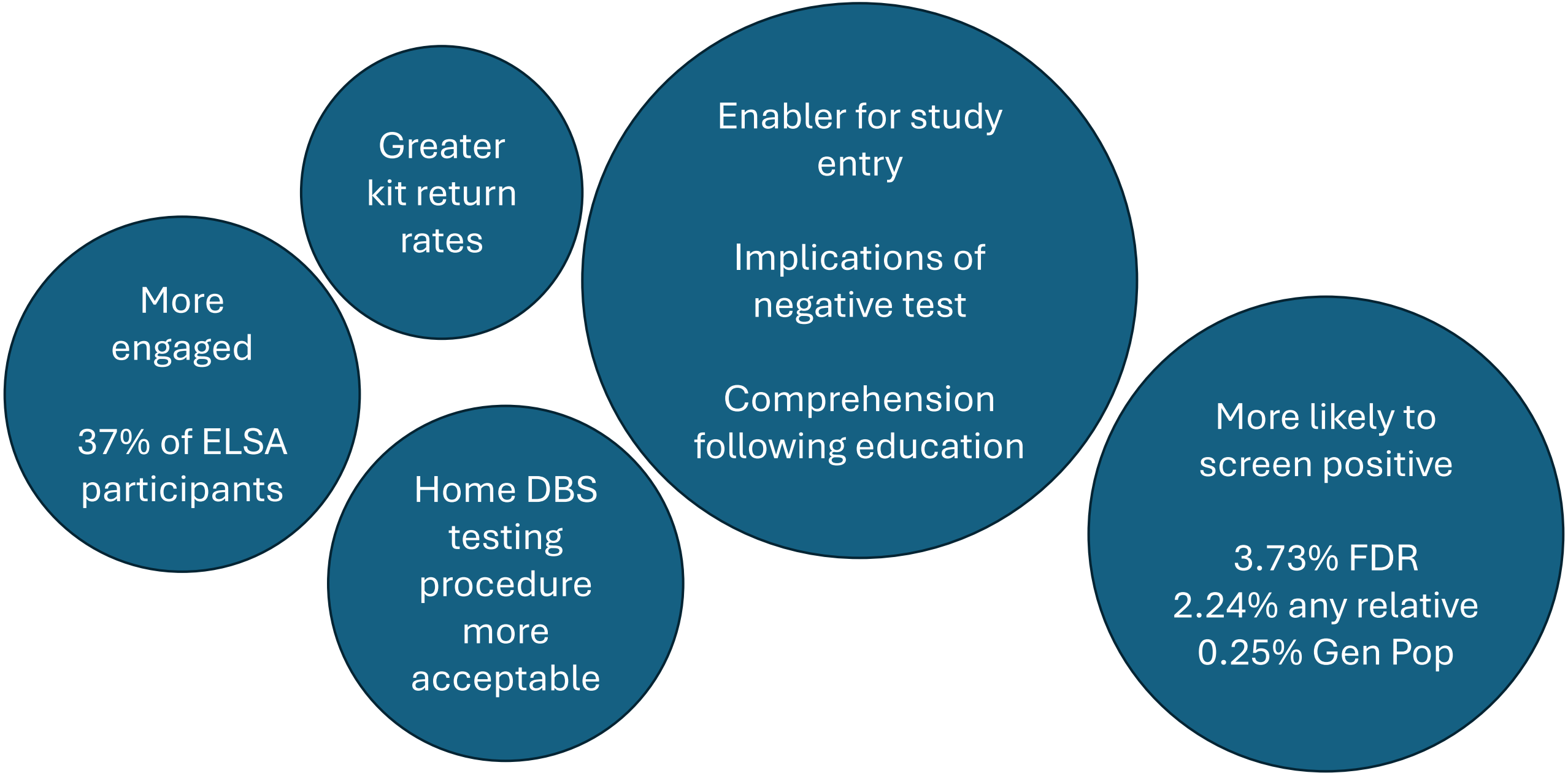
DBS positive

Families still felt worthwhile and grateful for taking part

Anxiety requiring psychological support was rare

Most experienced screening anxiety which persisted after the education session

(First Degree) Relatives are a good way to start



FDR screening of all T1D children in England £7M over 5 years

(180M / year flu vaccine)

24,500 children with T1D

Screening FDRs at 3 age points : £3M

Monitoring those with early T1D for 5 years : £4M

ELSA 2025-2029

- Increase screening age Age 2-17
- Genetics
- Health economics
- Monitoring and support
- Screening of relatives

NIHR | National Institute for Health and Care Research

Breakthrough T1D™ Formerly JDRF

DIABETES UK CARE. CONNECT. CAMPAIGN.

Thank you to all the families who have taken part!

University of BRISTOL

THE LEONA M. AND HARRY B. HELMSLEY CHARITABLE TRUST

TYPE 1 DIABETES RISK IN UK ADULTS

T1DRA
Type 1 Diabetes Risk in Adults

Study update 27 Oct 2025

bristol.ac.uk

Introduction

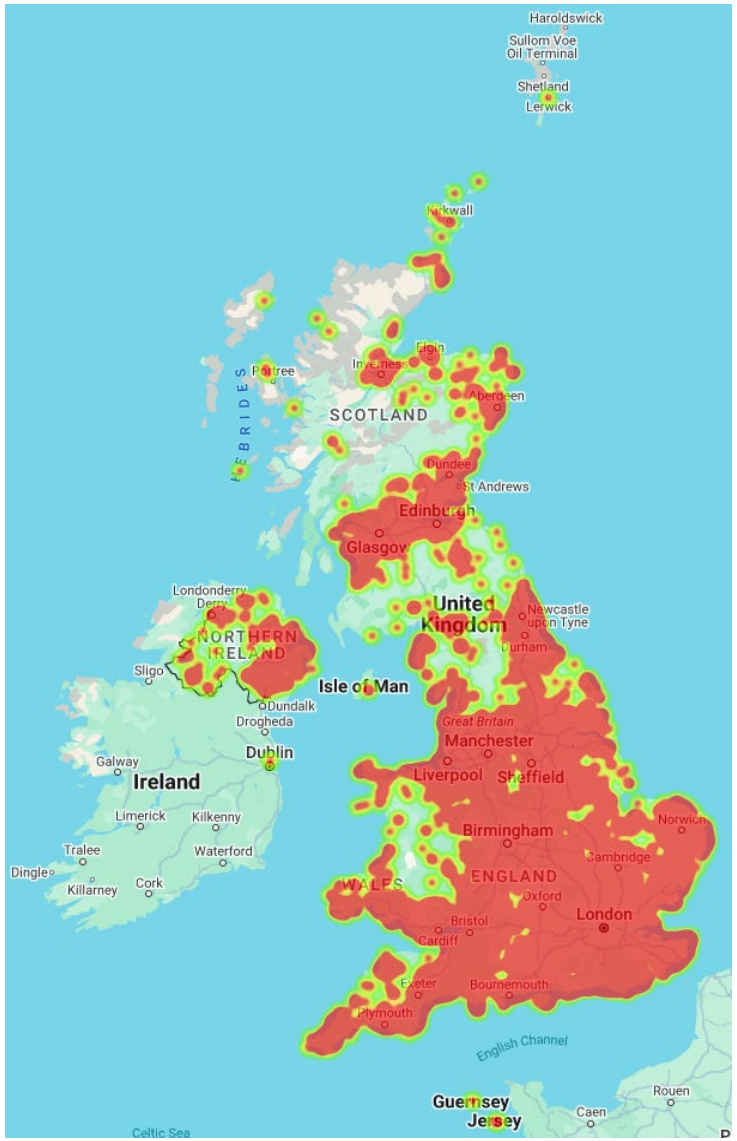
T1DRA was set up to understand the natural history of type 1 diabetes in adults by

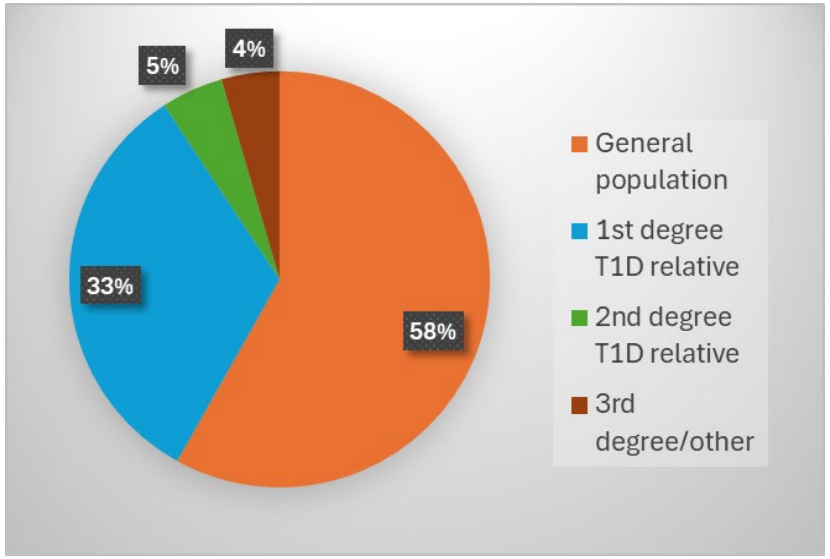
- screening individuals between the **ages of 18 and 70** years for the presence of
- islet autoantibodies using high performance tests.
- Positive individuals enter an annual monitoring programme

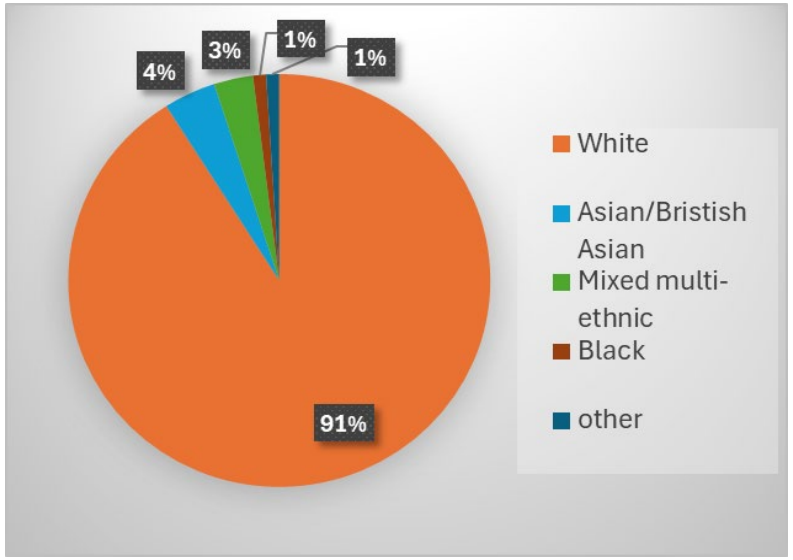
T1DRA
Type 1 Diabetes Risk in Adults

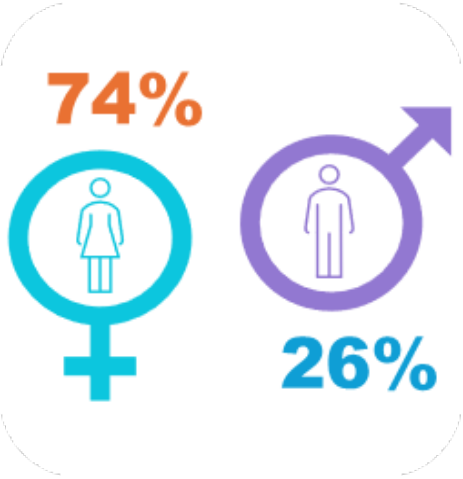
T1DRA Recruitment characteristics of 13535 adults

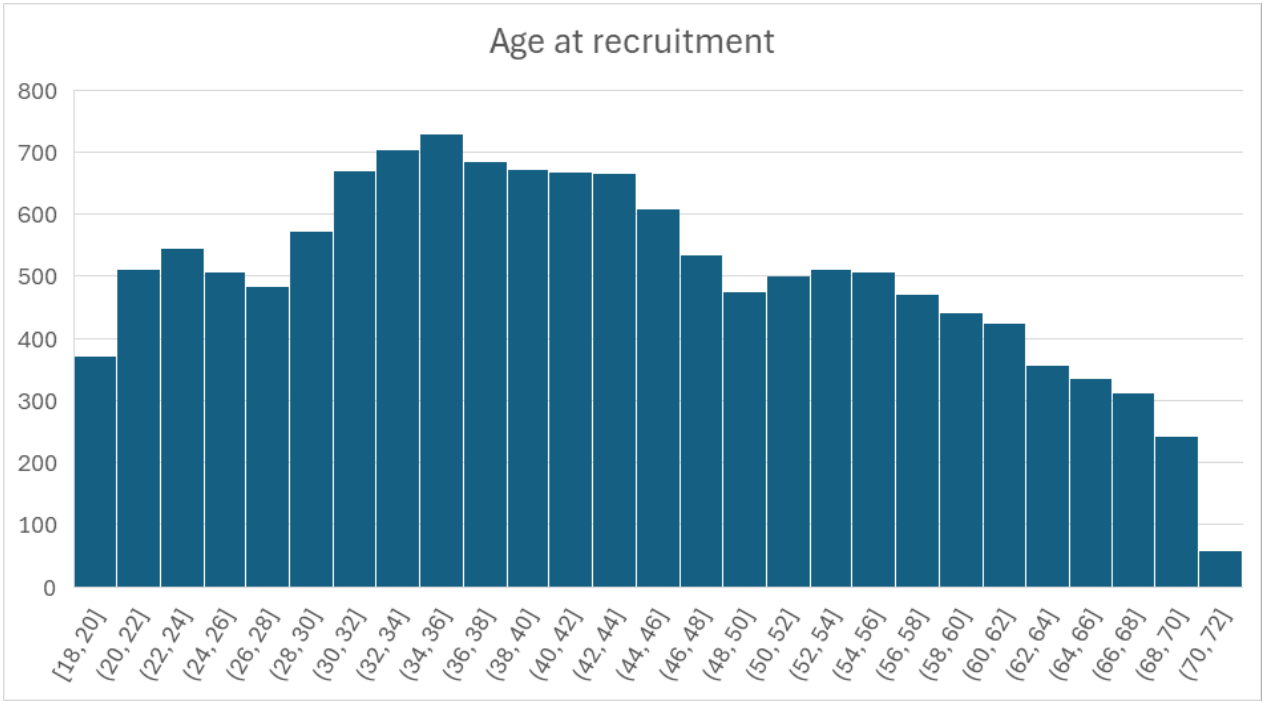
Data to 14 Oct 2025











T1DRA

T1dra.bristol.ac.uk

Study Design

T1DRA
Type 1 Diabetes Risk in Adults

Advertising

Recruitment → Consent online → Capillary sample kit posted (and returned)

Serum isolated/ volume recorded

Samples tested for IAA (RBA)/tGADA/IA-2A/ZnT8A LIPS

Confirmation sample requested on positives

Education about T1D and annual follow up including HbA1c offered to confirmed positive participants

T1DRA PPIE Group

Confirmed Positive adults (no diagnosis of Diabetes)

n= 290 without T2D (**3.7%** of participants screened)

Multiple islet autoantibody positives

n= 41 (**0.5%** of screens); 25x2abs, 15x3abs 1x4abs

(3 participants Dx T1D since screening)

Relatives 54.7%; General population 45.3%

Age: Median 36 years, (Range19-67 years); 70% female

Single islet autoantibody positives

n= 249 (**3.1%** of screens).159 tGADA; 40 ZnT8A, 39 IAA, 11 IA-2A

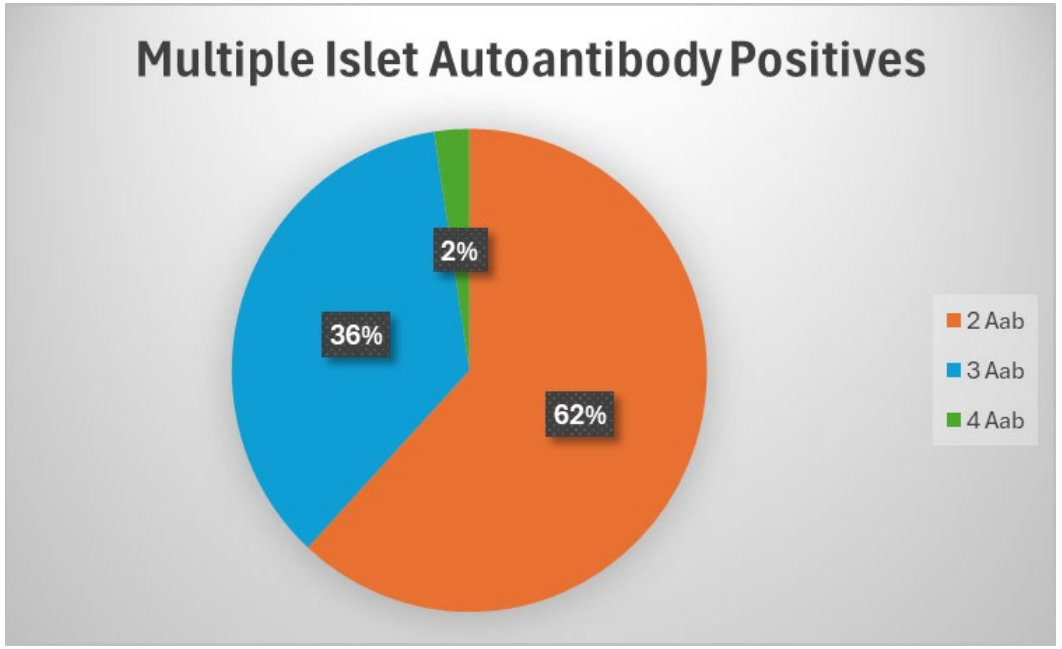
(2 participants Dx T1D since screening)

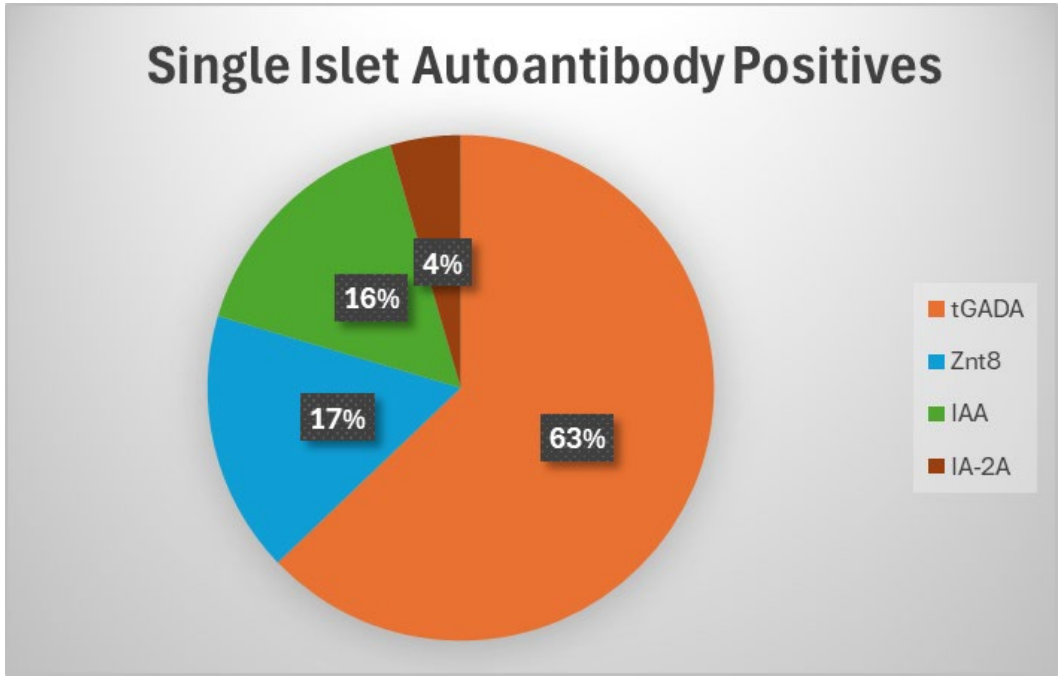
Relatives 59%; General population 41%

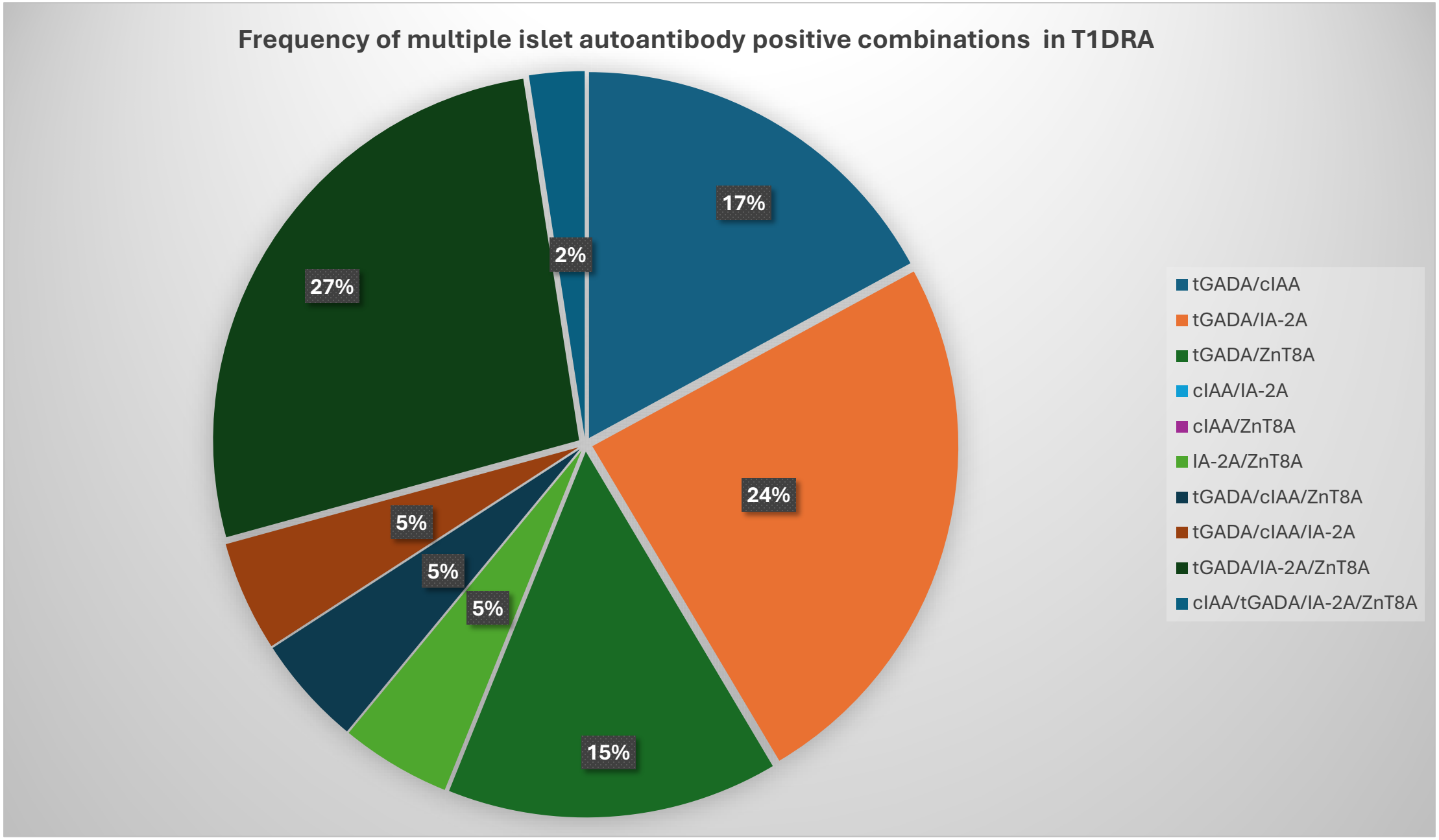
Age: Median 41.2 years, (Range 18-70 years)

81% female (64.5% tGADA); 19% male (54.3% tGADA)

Results as of 14th October






Frequency of multiple islet autoantibody positive combinations in T1DRA
17%
24%
15%
5%
5%
5%
27%
2%
tGADA/cIAA
tGADA/IA-2A
tGADA/ZnT8A
cIAA/IA-2A
cIAA/ZnT8A
IA-2A/ZnT8A
tGADA/cIAA/ZnT8A
tGADA/cIAA/IA-2A
tGADA/IA-2A/ZnT8A
cIAA/tGADA/IA-2A/ZnT8A

Follow up for T1DRA participants

- Annual islet autoantibodies
- HbA1c
- UCPCR/remote OGTT
- Make participants aware of upcoming clinical trials

Follow up

Nov 2023 Nov 2024 Oct 2025

Recruitment/Screening/Confirmation = 291 with islet abs

Annual follow up samples n=103

Same result – n=83
Single ab lost – n=13 – usually GADA
Single gained two abs – n=3
Single gained one – n=2
One three became 2
One two became 1

Review > Lancet Diabetes Endocrinol. 2025 Nov;13(11):980-986.
doi: 10.1016/S2213-8587(25)00260-8.

Managing adults with screen-detected islet autoantibody positivity: a pragmatic framework

Nicholas Thomas [1], Danijela Tatovic [2], Angus Jones [3], Parth Narendran [4]

Affiliations + expand
PMID: 41101877 DOI: 10.1016/S2213-8587(25)00260-8

FULL TEXT LINKS
ELSEVIER FULL-TEXT ARTICLE

ACTIONS
Cite
Collections
Permalink

HbA1c in Islet autoantibody positives close to confirmation

Stage 1 n=36
Stage 2 n= 4 – 2 offered Teplizumab (two tipped over to Stage 3)
Abnormal glucose tolerance - n=4 (2 GADA/IA-2A/ZnT8A; 1 IA-2A/ZnT8; 1 GADA/IA-2A)
Stage 3 n= 1

Stage 0 (Single positive) HbA1c data available on n=38
Type 1 diabetes diagnosis - n=2 (high single GADAs)
One participant did not send confirmation sample (3 abs) has been diagnosed
Year 0 follow up – High single GADA – raised Hba1c
Year 1 follow up – High Single IA-2A – raised HbA1c

Summary

- Almost 14,000 adults have been recruited to the T1DRA study
- Three quarters of participants are female
- Approximately one third of recruits are FDRs
- In the dataset thus far,
  - 0.5% of adults are multiple islet autoantibody positive
  - 3.1% of adults are single islet autoantibody positive
    - tGADA are the most prevalent
    - IAA are unexpectedly common
- Annual monitoring is ongoing in all positive participants
- Increasing focus on recruiting individuals from diverse backgrounds in the general population

Acknowledgements

Contact us:
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University of BRISTOL

Many thanks to the T1DRA Study Participants

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Co-I Prof Richard Oram, University of Exeter
Co-I Dr Danijela Tatovic, Cardiff University
Co-I Dr Nick Thomas, University of Exeter
Co-I Prof Susan Wong, Cardiff University

AWAF Alistair Williams Antibody Facility

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ELSA

UKT1D Research Consortium — Moving towards insulin-free T1D

Study Coordinator: Rachel Aitken
Study nurse: Clare Megson
Database Manager: Stu Toms
Antibody testing: The Alistair Williams Antibody Facility
Study support: Diabetes and Metabolism Research Group
T1DRA Management Board

Follow us of social media:
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