

# Utilizing microsampling to improve data, recruitment and diversity in clinical trials

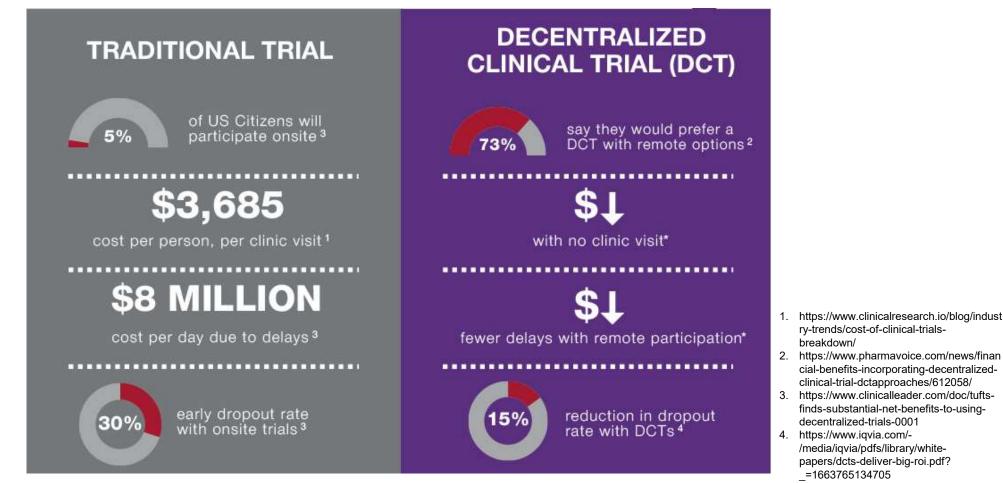
Minna Salonen, European Business Development Director Trajan Scientific & Medical







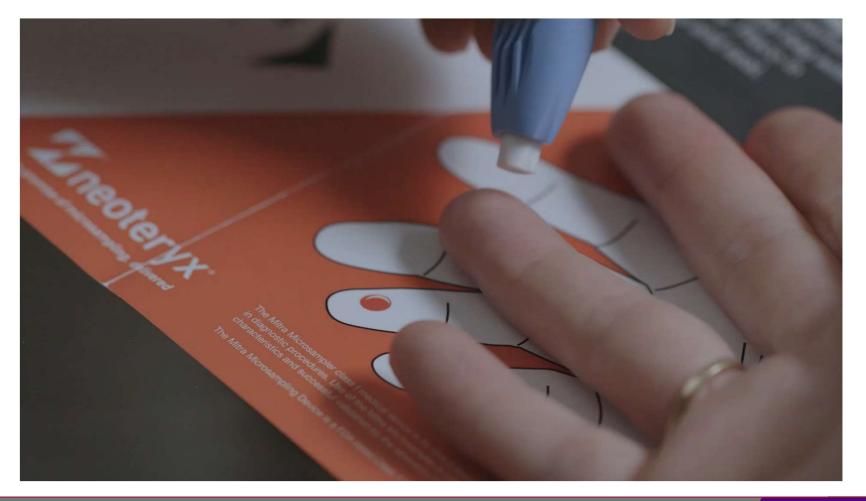
#### Why consider microsampling for decentralized trials?



#### A remote collection device like no other automated processing formats rapid, Compatible with quantitative, blood, urine, precise (RSD<4%) saliva (plus other collection up to bio fluids) 120μL / device > 99% sample acceptance rates1 SEC **User friendly** with visual fill indicator & minimal pain 1. NIH study, study size n=9029, sampling failure n=61, Sadtler, K, et al (2021), Mapping a Pandemic: SARS CoV-2 Seropositivity in the United

States medRxiv 2021.01.27.21250570

#### A remote collection device like no other



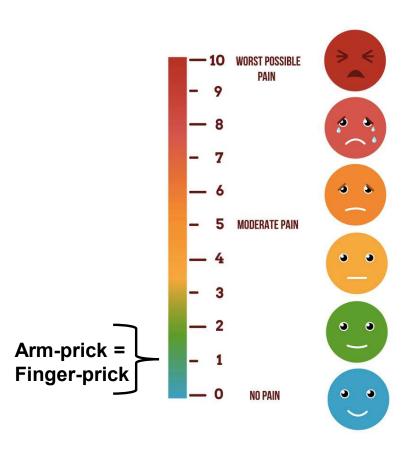
### Recruit more participants with at home sampling

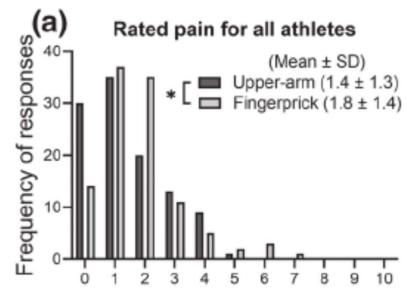


- ✓ Reduce site visits
- ✓ Eliminate cold-chain shipping costs
- ✓ Low sample rejection rate (<1%)\*

1. NIH study, study size n=9029, sampling failure n=61, Sadtler, K, et al (2021), Mapping a Pandemic: SARS CoV-2 Seropositivity in the United States medRxiv 2021.01.27.21250570

### Minimal pain levels reported with sampling





Pain rated from 0 (no pain) to 10 (worst imaginable pain)

Credit: <a href="https://doi.org/10.1002/dta.3135">https://doi.org/10.1002/dta.3135</a> Solheim, S., Ringsted, T, Nordsborg, N., Dehnes, Y., Levernaes, M., Morkeberg, J (2021). No pain, just gain: Painless, easy, and fast dried blood spot collection from fingertip and upper arm in doping control. Drug Testing and Analysis 13(10), 1783-1790

#### Eliminate cold-chain shipping costs

# SAMPLE TRANSPORT

#### COST CHALLENGE:

50%

Liquid blood samples must be shipped rapidly via cold-chain transport to centralized laboratories, which increases trial costs and can also lead to sample errors if not shipped correctly.

Predicted reduction in transport costs of dried blood samples that can be shipped at ambient temperatures via regular post with good sample stability.

# Options for automating sample processing

automated extractions on liquid handling workstation



semi-automated extractions on benchtop 96-channel pipettor



## Customize collection kits to your study protocol



- Options based on cohort (e.g. specialized lancets)
  - Infant
  - Pediatric
  - Adult
- Multiple devices per kit for longitudinal studies &/or to collect more volume
- Add additional lancets, bandages, etc.



Labeling / Barcoding / Packaging Add study specific labels to capture variable study details

- Adhere additional barcodes for chain of custody tracking
- Include return shipping address on sample return mailer
- Branding (e.g. custom kit boxes)



**Training Materials / Inserts** 

- Translation available for our standard IFU into any language
- Creation of custom IFUs &/or videos to match protocol
- Utilize our training videos & materials for participants
- Add custom inserts (e.g. requisition forms)



# Microsampling Experts Since 2014

IFU Videos & Custom Kits



Training for Clinicians & Sites



Application Support 300+ publications



Extraction Protocols & Bridging Study Support



