#1

COMPLETE

Collector:	Email Invitation 1 (Email)
Started:	Friday, May 20, 2022 8:15:14 AM
Last Modified:	Friday, May 20, 2022 8:34:25 AM
Time Spent:	00:19:11
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Q1

Please provide your company identifying code provided to you by Julian Arbuckle:

Respondent skipped this question

Q2

What type of company are you representing? [Multiple choice, one answer]:

Big pharma (>10,000 employees)

Q3

What is your most common stage of data that you work on within the company? [multiple choice, one answer]

Clinical research

Q4

In broad terms, what role best describes your position at the company (e.g. statistical geneticist?) [open text]

genomic Operational Expert

Q5

Is your company currently using (internally or externally sourced) Next Generation Sequencing (NGS) technologies for clinical PGx studies?

Yes

Q6

How often does your company currently use NGS technologies for clinical PGx studies? [Multiple choice, choose one answer]

Rarely used

Q7 For DNA sequencing, what approaches are being used? [Check all that apply]	**Whole Genome Sequencing,** **Whole Exome Sequencing,** **Targeted panels**
Q8 Which indications are using NGS for clinical PGx studies at your company? [Check all that apply]	**Opt out of answering**
Q9 Which phases of clinical development have utilized NGS technologies at your company? [Check all that apply]	**Respondent skipped this question**
Q10 To what extent are you using WES/WGS in your trials? [Choose one]	**Minority of trials**
Q11 What are your main motivations for generating WES/WGS in trials? [Select all that apply]	Other (please specify): investigation with multiple scope from the above
Q12 Is WES/WGS data being generated retrospectively in older completed studies? [Choose one]	**Yes, for specific trials when a specific question arises**
Q13 Is taking part in WES/WGS ever mandatory for participant inclusion into a trial? [Choose one]	**No WES/WGS generated**
Q14 If you answered "Yes" to Q13, did mandatory WES/WGS cause a significant challenge to recruitment into trials? (more than any other form of genetic data collection) [Select one option]	**Respondent skipped this question**
Q15 In general, when requesting WES/WGS in trials does it lead to reduced uptake of enrolment in the trial, or other logistical challenges? [Select one option]	**Yes, to a large degree**

Q16

To what extent have the American College of Medical Genetics' guidelines for returning genomic results to participants influenced your decision to include WES/WGS in trials? [Select one option]

Not a factor

Q17

Where do you receive the most pushback around inclusion of WES/WGS in trials? [One choice]

IRBs,

Country specific laws/guidelines,

Internal – Finance

Q18

Are there any common pushbacks from patients around WES/WGS? [Free text]

Respondent skipped this question

Q19

Are there any common pushbacks from sites/IRBs around WES/WGS? [Free text]

Ethic Committees

Q20

Are there any particular countries where you have difficulty implementing WES/WGS? [Free text]

yes

Q21

Have you identified any particularly successful strategies for increasing patient uptake of WES/WGS? [Multiple choice]

Respondent skipped this question

Q22

Which methods do you use for WES/WGS in clinical trials? [Select all that apply]

Deep sequencing

Q23

Do you generate WES/WGS to a CLIA standard or equivalent? [Select one]

NA

Q24

Do you generate WES/WGS alongside other data? [select all that apply]

Genome-wide genotyping

Q25

Which data management processes do you include for WES/WGS data from clinical trials? [Select all that apply]

Respondent skipped this question

Q26

Is there appetite to share genomic data from clinical trials as part of cross-industry collaborations? [Select one]

Respondent skipped this question

Q27

What are your main hesitations/bottlenecks for doing WES/WGS? [Select all that apply]

Local laws and regulations,

Insufficient scientific justification

Q28

Does the ability to collect WES/WGS data influence the selection of trial sites? [Choose one]

No

Q29

Does the ability to collect WGS data prevent basing trial sites within specific counties? [Choose one]

Yes, though it is a minor consideration

Q30

Do the rules around the return of results around WES/WGS specifically influence the selection of trial sites/countries?

No

Q31

Would easier/clearer rules around WES/WGS data collection in trials in a given country/site/jurisdiction increase the likelihood of your company basing a trial there?

No

Q32

Would your answers have changed if we had asked only about WES or WGS, rather than both? [Free text]

Respondent skipped this question

Q33

Are there any other comments or clarifications you would like to make? [Free text]

Feeling a trend for WGS/WES in US still an option, whereas in Europe (and other countries such as Israel) seems to become more complicated with stringent push-backs from ECs/IRBs when no very precise justification is given.

#2

COMPLETE

Collector:	Email Invitation 1 (Email)
Started:	Friday, May 20, 2022 1:45:59 PM
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Time Spent:	00:17:18
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Page 1

Q1

Please provide your company identifying code provided to you by Julian Arbuckle:

3444

Q2

What type of company are you representing? [Multiple choice, one answer]:

Big pharma (>10,000 employees)

Q3

What is your most common stage of data that you work on within the company? [multiple choice, one answer]

Clinical research

Q4

In broad terms, what role best describes your position at the company (e.g. statistical geneticist?) [open text]

Consent management expert, with a focus on consent for genetic analysis

Q5

Is your company currently using (internally or externally sourced) Next Generation Sequencing (NGS) technologies for clinical PGx studies?

Yes

Q6

How often does your company currently use NGS technologies for clinical PGx studies? [Multiple choice, choose one answer]

Widely used

Q7 For DNA sequencing, what approaches are being used? [Check all that apply]	**Whole Genome Sequencing,** **Whole Exome Sequencing,** **Targeted panels**
Q8 Which indications are using NGS for clinical PGx studies at your company? [Check all that apply]	**Neuroscience,** **Immunology,** **Infectious disease,** **Rare disease,** **Oncology,** **Other**
Q9 Which phases of clinical development have utilized NGS technologies at your company? [Check all that apply]	**Preclinical or research focused,** **Phase I,** **Phase IIa,** **Phase IIb,** **Phase III**
Q10 To what extent are you using WES/WGS in your trials? [Choose one]	**Majority of trials**
Q11 What are your main motivations for generating WES/WGS in trials? [Select all that apply]	**Ability to detect somatic mutations,** **Exploratory research into disease/new targets,** **Pharmacogenetics and predicting response**
Q12 Is WES/WGS data being generated retrospectively in older completed studies? [Choose one]	**Yes, for many trials as part of broader company wide effort**
Q13 Is taking part in WES/WGS ever mandatory for participant inclusion into a trial? [Choose one]	**Yes, in some trials**

Q14

If you answered "Yes" to Q13, did mandatory WES/WGS cause a significant challenge to recruitment into trials? (more than any other form of genetic data collection) [Select one option]

Yes, but minor challenges

Q15

In general, when requesting WES/WGS in trials does it lead to reduced uptake of enrolment in the trial, or other logistical challenges? [Select one option]

Yes, to a small degree

Q16

To what extent have the American College of Medical Genetics' guidelines for returning genomic results to participants influenced your decision to include WES/WGS in trials? [Select one option]

Not a factor

Q17

Where do you receive the most pushback around inclusion of WES/WGS in trials? [One choice]

IRBs,

Country specific laws/guidelines

Q18

Are there any common pushbacks from patients around WES/WGS? [Free text]

Respondent skipped this question

Q19

Are there any common pushbacks from sites/IRBs around WES/WGS? [Free text]

- some countries require that this is optional for study participants. Others require that the scope of use of generated data is restricted to research on the disease under investigation in the trial. Countries in EU ask that study participants be informed of incidental findings.

Q20

Are there any particular countries where you have difficulty implementing WES/WGS? [Free text]

Difficulties if WGS is mandatory for broad scope of research - very much challenged in Spain and other EU countries

Q21

Have you identified any particularly successful strategies for increasing patient uptake of WES/WGS? [Multiple choice]

Modifying consent wording to clarify risks/reason for research

Q22 Which methods do you use for WES/WGS in clinical trials? [Select all that apply]	**Respondent skipped this question**
Q23 Do you generate WES/WGS to a CLIA standard or equivalent? [Select one]	**Never**
Q24 Do you generate WES/WGS alongside other data? [select all that apply]	**Genome-wide genotyping**
Q25 Which data management processes do you include for WES/WGS data from clinical trials? [Select all that apply]	**Respondent skipped this question**
Q26 Is there appetite to share genomic data from clinical trials as part of cross-industry collaborations? [Select one]	**Yes – limited enthusiasm for selected projects**
Q27 What are your main hesitations/bottlenecks for doing WES/WGS? [Select all that apply]	**Local laws and regulations,** **Insufficient scientific justification**
Q28 Does the ability to collect WES/WGS data influence the selection of trial sites? [Choose one]	**No**
Q29 Does the ability to collect WGS data prevent basing trial sites within specific counties? [Choose one]	**No**
Q30 Do the rules around the return of results around WES/WGS specifically influence the selection of trial sites/countries?	**No**

Q31

Would easier/clearer rules around WES/WGS data collection in trials in a given country/site/jurisdiction increase the likelihood of your company basing a trial there?

No

Q32

Would your answers have changed if we had asked only about WES or WGS, rather than both? [Free text]

No

Q33

Are there any other comments or clarifications you would like to make? [Free text]

Respondent skipped this question

#3

COMPLETE

Collector:	Email Invitation 1 (Email)
Started:	Thursday, June 02, 2022 7:51:28 PM
Last Modified:	Thursday, June 02, 2022 8:06:23 PM
Time Spent:	00:14:55
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Q1

Please provide your company identifying code provided to you by Julian Arbuckle:

2299

Q2

What type of company are you representing? [Multiple choice, one answer]:

Mid to large size biotechnology (>1000 - ≤10,000 employees)

Q3

What is your most common stage of data that you work on within the company? [multiple choice, one answer]

Clinical research

Q4

In broad terms, what role best describes your position at the company (e.g. statistical geneticist?) [open text]

Clinical geneticist

Q5

Is your company currently using (internally or externally sourced) Next Generation Sequencing (NGS) technologies for clinical PGx studies?

Yes

Q6

How often does your company currently use NGS technologies for clinical PGx studies? [Multiple choice, choose one answer]

Widely used

Q7 For DNA sequencing, what approaches are being used? [Check all that apply]	**Whole Genome Sequencing,** **Whole Exome Sequencing,** **Targeted panels**
Q8 Which indications are using NGS for clinical PGx studies at your company? [Check all that apply]	**Neuroscience,** **Rare disease,** **Other**
Q9 Which phases of clinical development have utilized NGS technologies at your company? [Check all that apply]	**Phase I,** **Phase IIa,** **Phase IIb,** **Phase III,** **Phase IV**
Q10 To what extent are you using WES/WGS in your trials? [Choose one]	**Majority of trials**
Q11 What are your main motivations for generating WES/WGS in trials? [Select all that apply]	**Biobanking data that may be hard to retrieve later,** **Exploratory research into disease/new targets,** **Pharmacogenetics and predicting response,** **Inclusion/exclusion criteria,** **Use of genomic variables for stratification/covariates in trial**
Q12 Is WES/WGS data being generated retrospectively in older completed studies? [Choose one]	**Yes, for specific trials when a specific question arises**
Q13 Is taking part in WES/WGS ever mandatory for participant inclusion into a trial? [Choose one]	**Yes, in some trials**

Q14

If you answered "Yes" to Q13, did mandatory WES/WGS cause a significant challenge to recruitment into trials? (more than any other form of genetic data collection) [Select one option]

No meaningful impact on recruitment

Q15

In general, when requesting WES/WGS in trials does it lead to reduced uptake of enrolment in the trial, or other logistical challenges? [Select one option]

No/Negligible

Q16

To what extent have the American College of Medical Genetics' guidelines for returning genomic results to participants influenced your decision to include WES/WGS in trials? [Select one option]

Not a factor

Q17

Where do you receive the most pushback around inclusion of WES/WGS in trials? [One choice]

Country specific laws/guidelines

Q18

Are there any common pushbacks from patients around WES/WGS? [Free text]

Respondent skipped this question

Q19

Are there any common pushbacks from sites/IRBs around WES/WGS? [Free text]

Respondent skipped this question

Q20

Are there any particular countries where you have difficulty implementing WES/WGS? [Free text]

China, mostly.

Q21

Have you identified any particularly successful strategies for increasing patient uptake of WES/WGS? [Multiple choice]

Modifying consent wording to clarify risks/reason for research

Q22 Which methods do you use for WES/WGS in clinical trials? [Select all that apply]	**Respondent skipped this question**
Q23 Do you generate WES/WGS to a CLIA standard or equivalent? [Select one]	**Always**
Q24 Do you generate WES/WGS alongside other data? [select all that apply]	**Targeted clinical genotyping/gene panels**
Q25 Which data management processes do you include for WES/WGS data from clinical trials? [Select all that apply]	**Use of GxP compliant platforms**
Q26 Is there appetite to share genomic data from clinical trials as part of cross-industry collaborations? [Select one]	**Yes – limited enthusiasm for selected projects**
Q27 What are your main hesitations/bottlenecks for doing WES/WGS? [Select all that apply]	**Cost,** **Return of results,** **Too small a sample size in trials,** **Data management requirements**
Q28 Does the ability to collect WES/WGS data influence the selection of trial sites? [Choose one]	**Yes, it is a major consideration**
Q29 Does the ability to collect WGS data prevent basing trial sites within specific counties? [Choose one]	**Yes, though it is a minor consideration**
Q30 Do the rules around the return of results around WES/WGS specifically influence the selection of trial sites/countries?	**Yes, though it is a minor consideration**

Q31

Would easier/clearer rules around WES/WGS data collection in trials in a given country/site/jurisdiction increase the likelihood of your company basing a trial there?

Yes, it would be a lesser factor

Q32

Would your answers have changed if we had asked only about WES or WGS, rather than both? [Free text]

no

Q33

Are there any other comments or clarifications you would like to make? [Free text]

Respondent skipped this question

#4

COMPLETE

Collector:	Email Invitation 1 (Email)
Started:	Tuesday, June 07, 2022 12:06:20 PM
Last Modified:	Tuesday, June 07, 2022 12:22:12 PM
Time Spent:	00:15:52
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Q1

Please provide your company identifying code provided to you by Julian Arbuckle:

4099

Q2

What type of company are you representing? [Multiple choice, one answer]:

Mid to large size biotechnology (>1000 - ≤10,000 employees)

Q3

What is your most common stage of data that you work on within the company? [multiple choice, one answer]

Clinical research

Q4

In broad terms, what role best describes your position at the company (e.g. statistical geneticist?) [open text]

Analysis of clinical trial genomic data

Q5

Is your company currently using (internally or externally sourced) Next Generation Sequencing (NGS) technologies for clinical PGx studies?

Yes

Q6

How often does your company currently use NGS technologies for clinical PGx studies? [Multiple choice, choose one answer]

Occasionally used

Q7 For DNA sequencing, what approaches are being used? [Check all that apply]	**Whole Genome Sequencing,** **Targeted panels**
Q8 Which indications are using NGS for clinical PGx studies at your company? [Check all that apply]	**Metabolism,** **Rare disease,** **Oncology,** **Other**
Q9 Which phases of clinical development have utilized NGS technologies at your company? [Check all that apply]	**Preclinical or research focused,** **Phase I,** **Phase IIa,** **Phase IIb,** **Phase III**
Q10 To what extent are you using WES/WGS in your trials? [Choose one]	**Majority of trials**
Q11 What are your main motivations for generating WES/WGS in trials? [Select all that apply]	**Biobanking data that may be hard to retrieve later,** **Ability to detect somatic mutations,** **Expansion opportunities,** **Pharmacogenetics and predicting response,** **Inclusion/exclusion criteria**
Q12 Is WES/WGS data being generated retrospectively in older completed studies? [Choose one]	**Yes, for many trials as part of broader company wide effort**
Q13 Is taking part in WES/WGS ever mandatory for participant inclusion into a trial? [Choose one]	**No and never has been**

Q14

If you answered "Yes" to Q13, did mandatory WES/WGS cause a significant challenge to recruitment into trials? (more than any other form of genetic data collection) [Select one option]

NA

Q15

In general, when requesting WES/WGS in trials does it lead to reduced uptake of enrolment in the trial, or other logistical challenges? [Select one option]

No/Negligible

Q16

To what extent have the American College of Medical Genetics' guidelines for returning genomic results to participants influenced your decision to include WES/WGS in trials? [Select one option]

To a small extent – decreasing likelihood of WES/WGS use

Q17

Where do you receive the most pushback around inclusion of WES/WGS in trials? [One choice]

IRBs

Q18

Are there any common pushbacks from patients around WES/WGS? [Free text]

Concerns about local IRBs/rules making it difficult - and that impacting clinical operations.

Q19

Are there any common pushbacks from sites/IRBs around WES/WGS? [Free text]

Restrictions on use of samples for WGS, whether it is scientifically justified, return of results.

Q20

Are there any particular countries where you have difficulty implementing WES/WGS? [Free text]

South Africa, Brazil, Taiwan

Q21

Have you identified any particularly successful strategies for increasing patient uptake of WES/WGS? [Multiple choice]

Other (please specify):
Engaging PIs, FAQs for IRBs [multiple choice did not work]

Q22 Which methods do you use for WES/WGS in clinical trials? [Select all that apply]	**Low depth sequencing**
Q23 Do you generate WES/WGS to a CLIA standard or equivalent? [Select one]	**Never**
Q24 Do you generate WES/WGS alongside other data? [select all that apply]	Other (please specify): All of the above
Q25 Which data management processes do you include for WES/WGS data from clinical trials? [Select all that apply]	**Use of GxP compliant platforms,** **GDPR specific checks**
Q26 Is there appetite to share genomic data from clinical trials as part of cross-industry collaborations? [Select one]	**Yes – very keen**
Q27 What are your main hesitations/bottlenecks for doing WES/WGS? [Select all that apply]	**Reduced uptake during recruitment,** **Local laws and regulations,** **Return of results**
Q28 Does the ability to collect WES/WGS data influence the selection of trial sites? [Choose one]	**Yes, though it is a minor consideration**
Q29 Does the ability to collect WGS data prevent basing trial sites within specific counties? [Choose one]	**Yes, though it is a minor consideration**
Q30 Do the rules around the return of results around WES/WGS specifically influence the selection of trial sites/countries?	**No**

Q31

Would easier/clearer rules around WES/WGS data collection in trials in a given country/site/jurisdiction increase the likelihood of your company basing a trial there?

Yes, it would be a lesser factor

Q32

Would your answers have changed if we had asked only about WES or WGS, rather than both? [Free text]

No - though we prefer WGS given limited increase in cost and importance of non-genic regions

Q33

Are there any other comments or clarifications you would like to make? [Free text]

Respondent skipped this question

#5

COMPLETE

Collector:	Email Invitation 1 (Email)
Started:	Monday, June 06, 2022 1:47:55 PM
Last Modified:	Tuesday, June 07, 2022 12:57:03 PM
Time Spent:	23:09:08
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Q1

Please provide your company identifying code provided to you by Julian Arbuckle:

7333

Q2

What type of company are you representing? [Multiple choice, one answer]:

Big pharma (>10,000 employees)

Q3

What is your most common stage of data that you work on within the company? [multiple choice, one answer]

Clinical research

Q4

In broad terms, what role best describes your position at the company (e.g. statistical geneticist?) [open text]

Biomarker/PGx SME

Q5

Is your company currently using (internally or externally sourced) Next Generation Sequencing (NGS) technologies for clinical PGx studies?

Yes

Q6

How often does your company currently use NGS technologies for clinical PGx studies? [Multiple choice, choose one answer]

Rarely used

Q7 For DNA sequencing, what approaches are being used? [Check all that apply]	**Whole Exome Sequencing,** **Targeted panels**
Q8 Which indications are using NGS for clinical PGx studies at your company? [Check all that apply]	**Opt out of answering**
Q9 Which phases of clinical development have utilized NGS technologies at your company? [Check all that apply]	**Preclinical or research focused,** **Phase IIa,** **Phase IIb,** **Phase III,** **Phase IV**
Q10 To what extent are you using WES/WGS in your trials? [Choose one]	**Minority of trials**
Q11 What are your main motivations for generating WES/WGS in trials? [Select all that apply]	**Ability to detect somatic mutations,** **Exploratory research into disease/new targets,** **Expansion opportunities**
Q12 Is WES/WGS data being generated retrospectively in older completed studies? [Choose one]	**Yes, for specific trials when a specific question arises**
Q13 Is taking part in WES/WGS ever mandatory for participant inclusion into a trial? [Choose one]	**No and never has been**
Q14 If you answered "Yes" to Q13, did mandatory WES/WGS cause a significant challenge to recruitment into trials? (more than any other form of genetic data collection) [Select one option]	**NA**

Q15

In general, when requesting WES/WGS in trials does it lead to reduced uptake of enrolment in the trial, or other logistical challenges? [Select one option]

No/Negligible

Q16

To what extent have the American College of Medical Genetics' guidelines for returning genomic results to participants influenced your decision to include WES/WGS in trials? [Select one option]

To a large extent – decreasing likelihood of WES/WGS use

Q17

Where do you receive the most pushback around inclusion of WES/WGS in trials? [One choice]

Internal – Operations

Q18

Are there any common pushbacks from patients around WES/WGS? [Free text]

Not of which I am aware

Q19

Are there any common pushbacks from sites/IRBs around WES/WGS? [Free text]

Scope of use, patient privacy protection, access to data and how incidental findings would be managed

Q20

Are there any particular countries where you have difficulty implementing WES/WGS? [Free text]

Turkey and Canada have both pushed back regarding potential WES/WGS even when optional

Q21

Have you identified any particularly successful strategies for increasing patient uptake of WES/WGS? [Multiple choice]

Engaging PIs

Q22

Which methods do you use for WES/WGS in clinical trials? [Select all that apply]

Low depth sequencing

Q23 Do you generate WES/WGS to a CLIA standard or equivalent? [Select one]	**NA**
Q24 Do you generate WES/WGS alongside other data? [select all that apply]	Other (please specify): RNA-seq and proteomics (survey wouldn't let me check the 2 boxes)
Q25 Which data management processes do you include for WES/WGS data from clinical trials? [Select all that apply]	**Use of GxP compliant platforms,** **CDISC data formats,** **GDPR specific checks**
Q26 Is there appetite to share genomic data from clinical trials as part of cross-industry collaborations? [Select one]	**No**
Q27 What are your main hesitations/bottlenecks for doing WES/WGS? [Select all that apply]	**Cost,** **Local laws and regulations,** **Return of results,** **Insufficient scientific justification,** **Too small a sample size in trials**
Q28 Does the ability to collect WES/WGS data influence the selection of trial sites? [Choose one]	**No**
Q29 Does the ability to collect WGS data prevent basing trial sites within specific counties? [Choose one]	**No**
Q30 Do the rules around the return of results around WES/WGS specifically influence the selection of trial sites/countries?	**No**

Q31

Would easier/clearer rules around WES/WGS data collection in trials in a given country/site/jurisdiction increase the likelihood of your company basing a trial there?

It might occasionally be a factor

Q32

Would your answers have changed if we had asked only about WES or WGS, rather than both? [Free text]

No, except for perhaps cost, WES and WGS have the same issues for us

Q33

Are there any other comments or clarifications you would like to make? [Free text]

WGS has not been used, WES is occasionally used, but rarely and in a research or post-trial research use. Most common use is NGS for targeted applications and we still get pushback from ECs/IRBs lumping "NGS" together regardless if targeted or broad. For question 15, we don't have mandatory inclusion of WES/WGS, but we do have this included as optional testing and so have had no issues impacting enrollment.

#6

COMPLETE

Collector:	Email Invitation 1 (Email)
Started:	Tuesday, June 07, 2022 3:31:01 PM
Last Modified:	Tuesday, June 07, 2022 5:12:12 PM
Time Spent:	01:41:11
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Page 1

Q1

Please provide your company identifying code provided to you by Julian Arbuckle:

8008

Q2

What type of company are you representing? [Multiple choice, one answer]:

Big pharma (>10,000 employees)

Q3

What is your most common stage of data that you work on within the company? [multiple choice, one answer]

Clinical research

Q4

In broad terms, what role best describes your position at the company (e.g. statistical geneticist?) [open text]

Pharmacogenomics head

Q5

Is your company currently using (internally or externally sourced) Next Generation Sequencing (NGS) technologies for clinical PGx studies?

Yes

Q6

How often does your company currently use NGS technologies for clinical PGx studies? [Multiple choice, choose one answer]

Widely used

Q7 For DNA sequencing, what approaches are being used? [Check all that apply]	**Whole Exome Sequencing**
Q8 Which indications are using NGS for clinical PGx studies at your company? [Check all that apply]	**Cardiovascular,** **Metabolism,** **Neuroscience,** **Immunology,** **Infectious disease,** **Rare disease,** **Oncology**
Q9 Which phases of clinical development have utilized NGS technologies at your company? [Check all that apply]	**Preclinical or research focused,** **Phase I,** **Phase IIa,** **Phase IIb,** **Phase III,** **Phase IV**
Q10 To what extent are you using WES/WGS in your trials? [Choose one]	**Majority of trials**
Q11 What are your main motivations for generating WES/WGS in trials? [Select all that apply]	**Pharmacogenetics and predicting response,** **Use of genomic variables for stratification/covariates in trial**
Q12 Is WES/WGS data being generated retrospectively in older completed studies? [Choose one]	**Yes, for many trials as part of broader company wide effort**
Q13 Is taking part in WES/WGS ever mandatory for participant inclusion into a trial? [Choose one]	**Yes, in some trials**

Q14

If you answered "Yes" to Q13, did mandatory WES/WGS cause a significant challenge to recruitment into trials? (more than any other form of genetic data collection) [Select one option]

Yes, large challenges for recruitment

Q15

In general, when requesting WES/WGS in trials does it lead to reduced uptake of enrolment in the trial, or other logistical challenges? [Select one option]

No/Negligible

Q16

To what extent have the American College of Medical Genetics' guidelines for returning genomic results to participants influenced your decision to include WES/WGS in trials? [Select one option]

Not a factor

Q17

Where do you receive the most pushback around inclusion of WES/WGS in trials? [One choice]

IRBs,

Country specific laws/guidelines

Q18

Are there any common pushbacks from patients around WES/WGS? [Free text]

Respondent skipped this question

Q19

Are there any common pushbacks from sites/IRBs around WES/WGS? [Free text]

Respondent skipped this question

Q20

Are there any particular countries where you have difficulty implementing WES/WGS? [Free text]

Respondent skipped this question

Q21

Have you identified any particularly successful strategies for increasing patient uptake of WES/WGS? [Multiple choice]

Modifying consent wording to clarify risks/reason for research

Q22

Which methods do you use for WES/WGS in clinical trials? [Select all that apply]

Deep sequencing

Q23 Do you generate WES/WGS to a CLIA standard or equivalent? [Select one]	**Never**
Q24 Do you generate WES/WGS alongside other data? [select all that apply]	**Genome-wide genotyping**
Q25 Which data management processes do you include for WES/WGS data from clinical trials? [Select all that apply]	**Respondent skipped this question**
Q26 Is there appetite to share genomic data from clinical trials as part of cross-industry collaborations? [Select one]	**Yes – very keen**
Q27 What are your main hesitations/bottlenecks for doing WES/WGS? [Select all that apply]	Other (please specify): No hesitation.
Q28 Does the ability to collect WES/WGS data influence the selection of trial sites? [Choose one]	**No**
Q29 Does the ability to collect WGS data prevent basing trial sites within specific counties? [Choose one]	**No**
Q30 Do the rules around the return of results around WES/WGS specifically influence the selection of trial sites/countries?	**Yes, though it is a minor consideration**
Q31 Would easier/clearer rules around WES/WGS data collection in trials in a given country/site/jurisdiction increase the likelihood of your company basing a trial there?	**Yes, it would be a lesser factor**

Q32

Would your answers have changed if we had asked only about WES or WGS, rather than both? [Free text]

no

Q33

Are there any other comments or clarifications you would like to make? [Free text]

Respondent skipped this question

#7

COMPLETE

Collector:	Email Invitation 1 (Email)
Started:	Friday, June 10, 2022 5:55:52 AM
Last Modified:	Friday, June 10, 2022 6:12:55 AM
Time Spent:	00:17:02
Email:	elina.serkkola@orionpharma.com
IP Address:	85.76.43.14

Page 1

Q1

Please provide your company identifying code provided to you by Julian Arbuckle:

7755

Q2

What type of company are you representing? [Multiple choice, one answer]:

Mid to large size biotechnology (>1000 - ≤10,000 employees)

Q3

What is your most common stage of data that you work on within the company? [multiple choice, one answer]

Preclinical research

Q4

In broad terms, what role best describes your position at the company (e.g. statistical geneticist?) [open text]

Biomarker specialist

Q5

Is your company currently using (internally or externally sourced) Next Generation Sequencing (NGS) technologies for clinical PGx studies?

Yes

Q6

How often does your company currently use NGS technologies for clinical PGx studies? [Multiple choice, choose one answer]

Widely used

Q7 For DNA sequencing, what approaches are being used? [Check all that apply]	**Targeted panels**
Q8 Which indications are using NGS for clinical PGx studies at your company? [Check all that apply]	**Oncology**
Q9 Which phases of clinical development have utilized NGS technologies at your company? [Check all that apply]	**Preclinical or research focused,** **Phase I,** **Phase IIa,** **Phase IIb**
Q10 To what extent are you using WES/WGS in your trials? [Choose one]	**None**
Q11 What are your main motivations for generating WES/WGS in trials? [Select all that apply]	Other (please specify): NA
Q12 Is WES/WGS data being generated retrospectively in older completed studies? [Choose one]	**No - it is not a priority**
Q13 Is taking part in WES/WGS ever mandatory for participant inclusion into a trial? [Choose one]	**No and never has been**
Q14 If you answered "Yes" to Q13, did mandatory WES/WGS cause a significant challenge to recruitment into trials? (more than any other form of genetic data collection) [Select one option]	**Respondent skipped this question**
Q15 In general, when requesting WES/WGS in trials does it lead to reduced uptake of enrolment in the trial, or other logistical challenges? [Select one option]	**NA**

Q16

To what extent have the American College of Medical Genetics' guidelines for returning genomic results to participants influenced your decision to include WES/WGS in trials? [Select one option]

NA

Q17

Where do you receive the most pushback around inclusion of WES/WGS in trials? [One choice]

Internal – Scientific rationale

Q18

Are there any common pushbacks from patients around WES/WGS? [Free text]

NA

Q19

Are there any common pushbacks from sites/IRBs around WES/WGS? [Free text]

NA

Q20

Are there any particular countries where you have difficulty implementing WES/WGS? [Free text]

NA

Q21

Have you identified any particularly successful strategies for increasing patient uptake of WES/WGS? [Multiple choice]

Other (please specify):
NA

Q22

Which methods do you use for WES/WGS in clinical trials? [Select all that apply]

Respondent skipped this question

Q23

Do you generate WES/WGS to a CLIA standard or equivalent? [Select one]

NA

Q24

Do you generate WES/WGS alongside other data? [select all that apply]

Other (please specify):
NA

Q25

Which data management processes do you include for WES/WGS data from clinical trials? [Select all that apply]

Respondent skipped this question

Q26

Is there appetite to share genomic data from clinical trials as part of cross-industry collaborations? [Select one]

No

Q27

What are your main hesitations/bottlenecks for doing WES/WGS? [Select all that apply]

Cost,

Insufficient scientific justification

Q28

Does the ability to collect WES/WGS data influence the selection of trial sites? [Choose one]

No

Q29

Does the ability to collect WGS data prevent basing trial sites within specific counties? [Choose one]

No

Q30

Do the rules around the return of results around WES/WGS specifically influence the selection of trial sites/countries?

No

Q31

Would easier/clearer rules around WES/WGS data collection in trials in a given country/site/jurisdiction increase the likelihood of your company basing a trial there?

No

Q32

Would your answers have changed if we had asked only about WES or WGS, rather than both? [Free text]

No

Q33

Are there any other comments or clarifications you would like to make? [Free text]

-

#8

COMPLETE

Collector:	Email Invitation 1 (Email)
Started:	Friday, June 10, 2022 4:25:33 PM
Last Modified:	Friday, June 10, 2022 4:30:41 PM
Time Spent:	00:05:07
Email:	lea.c.harty@pfizer.com
IP Address:	148.168.96.5

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Q1

Please provide your company identifying code provided to you by Julian Arbuckle:

2772

Q2

What type of company are you representing? [Multiple choice, one answer]:

Big pharma (>10,000 employees)

Q3

What is your most common stage of data that you work on within the company? [multiple choice, one answer]

Clinical research

Q4

In broad terms, what role best describes your position at the company (e.g. statistical geneticist?) [open text]

Genetics lab scientist; biomarker lead; biospecimen oversight head; bioinformaticist

Q5

Is your company currently using (internally or externally sourced) Next Generation Sequencing (NGS) technologies for clinical PGx studies?

Yes

Q6

How often does your company currently use NGS technologies for clinical PGx studies? [Multiple choice, choose one answer]

Occasionally used

Q7 For DNA sequencing, what approaches are being used? [Check all that apply]	**Whole Genome Sequencing,** **Whole Exome Sequencing,** **Targeted panels**
Q8 Which indications are using NGS for clinical PGx studies at your company? [Check all that apply]	**Metabolism,** **Immunology,** **Infectious disease,** **Rare disease,** **Oncology**
Q9 Which phases of clinical development have utilized NGS technologies at your company? [Check all that apply]	**Preclinical or research focused,** **Phase I,** **Phase IIa,** **Phase IIb,** **Phase III**
Q10 To what extent are you using WES/WGS in your trials? [Choose one]	**Minority of trials**
Q11 What are your main motivations for generating WES/WGS in trials? [Select all that apply]	**Ability to detect somatic mutations,** **Exploratory research into disease/new targets,** **Pharmacogenetics and predicting response,** Other (please specify): Monitoring pharmacodynamic response
Q12 Is WES/WGS data being generated retrospectively in older completed studies? [Choose one]	**Yes, for specific trials when a specific question arises**
Q13 Is taking part in WES/WGS ever mandatory for participant inclusion into a trial? [Choose one]	**Yes, in some trials**

Q14

If you answered "Yes" to Q13, did mandatory WES/WGS cause a significant challenge to recruitment into trials? (more than any other form of genetic data collection) [Select one option]

No meaningful impact on recruitment

Q15

In general, when requesting WES/WGS in trials does it lead to reduced uptake of enrolment in the trial, or other logistical challenges? [Select one option]

Yes, to a small degree

Q16

To what extent have the American College of Medical Genetics' guidelines for returning genomic results to participants influenced your decision to include WES/WGS in trials? [Select one option]

Not a factor

Q17

Where do you receive the most pushback around inclusion of WES/WGS in trials? [One choice]

Country specific laws/guidelines

Q18

Are there any common pushbacks from patients around WES/WGS? [Free text]

No

Q19

Are there any common pushbacks from sites/IRBs around WES/WGS? [Free text]

Yes. Pushback due to sensitivity of genetic information.

Q20

Are there any particular countries where you have difficulty implementing WES/WGS? [Free text]

Turkey; China

Q21

Have you identified any particularly successful strategies for increasing patient uptake of WES/WGS? [Multiple choice]

Other (please specify):
No; patient uptake has not been a big issue for us

Q22 Which methods do you use for WES/WGS in clinical trials? [Select all that apply]	**Deep sequencing**
Q23 Do you generate WES/WGS to a CLIA standard or equivalent? [Select one]	**Sometimes**
Q24 Do you generate WES/WGS alongside other data? [select all that apply]	Other (please specify): Question will not allow multiple choice. Answer is: Targeted panels + RNAseq + Proteomics + Metabolomics
Q25 Which data management processes do you include for WES/WGS data from clinical trials? [Select all that apply]	**CDISC data formats**
Q26 Is there appetite to share genomic data from clinical trials as part of cross-industry collaborations? [Select one]	**Yes – limited enthusiasm for selected projects**
Q27 What are your main hesitations/bottlenecks for doing WES/WGS? [Select all that apply]	**Cost,** **Local laws and regulations,** **Insufficient scientific justification,** **Too small a sample size in trials**
Q28 Does the ability to collect WES/WGS data influence the selection of trial sites? [Choose one]	**No**
Q29 Does the ability to collect WGS data prevent basing trial sites within specific counties? [Choose one]	**No**
Q30 Do the rules around the return of results around WES/WGS specifically influence the selection of trial sites/countries?	**No**

Q31

Would easier/clearer rules around WES/WGS data collection in trials in a given country/site/jurisdiction increase the likelihood of your company basing a trial there?

No

Q32

Would your answers have changed if we had asked only about WES or WGS, rather than both? [Free text]

No

Q33

Are there any other comments or clarifications you would like to make? [Free text]

Respondent skipped this question

#9

COMPLETE

Collector:	Email Invitation 1 (Email)
Started:	Friday, June 10, 2022 5:07:21 PM
Last Modified:	Friday, June 10, 2022 5:13:24 PM
Time Spent:	00:06:03
Email:	helen.stevens1@astrazeneca.com
IP Address:	147.161.166.179

Page 1

Q1

Please provide your company identifying code provided to you by Julian Arbuckle:

2999

Q2

What type of company are you representing? [Multiple choice, one answer]:

Big pharma (>10,000 employees)

Q3

What is your most common stage of data that you work on within the company? [multiple choice, one answer]

Clinical research

Q4

In broad terms, what role best describes your position at the company (e.g. statistical geneticist?) [open text]

supporting inclusion of broad PGx analysis in clinical studies

Q5

Is your company currently using (internally or externally sourced) Next Generation Sequencing (NGS) technologies for clinical PGx studies?

Yes

Q6

How often does your company currently use NGS technologies for clinical PGx studies? [Multiple choice, choose one answer]

Widely used

Q7

For DNA sequencing, what approaches are being used? [Check all that apply]

Whole Genome Sequencing,

Whole Exome Sequencing,

Targeted panels

Q8

Which indications are using NGS for clinical PGx studies at your company? [Check all that apply]

Cardiovascular,

Metabolism,

Neuroscience,

Immunology,

Infectious disease,

Rare disease,

Oncology

Q9

Which phases of clinical development have utilized NGS technologies at your company? [Check all that apply]

Preclinical or research focused,

Phase I,

Phase IIa,

Phase IIb,

Phase III

Q10

To what extent are you using WES/WGS in your trials? [Choose one]

Majority of trials

Q11

What are your main motivations for generating WES/WGS in trials? [Select all that apply]

Exploratory research into disease/new targets,

Pharmacogenetics and predicting response,

Inclusion/exclusion criteria,

Use of genomic variables for stratification/covariates in trial

Q12

Is WES/WGS data being generated retrospectively in older completed studies? [Choose one]

Yes, for specific trials when a specific question arises

Q13

Is taking part in WES/WGS ever mandatory for participant inclusion into a trial? [Choose one]

Respondent skipped this question

Q14

If you answered "Yes" to Q13, did mandatory WES/WGS cause a significant challenge to recruitment into trials? (more than any other form of genetic data collection) [Select one option]

Respondent skipped this question

Q15

In general, when requesting WES/WGS in trials does it lead to reduced uptake of enrolment in the trial, or other logistical challenges? [Select one option]

Respondent skipped this question

Q16

To what extent have the American College of Medical Genetics' guidelines for returning genomic results to participants influenced your decision to include WES/WGS in trials? [Select one option]

Not a factor

Q17

Where do you receive the most pushback around inclusion of WES/WGS in trials? [One choice]

IRBs,

Country specific laws/guidelines

Q18

Are there any common pushbacks from patients around WES/WGS? [Free text]

Respondent skipped this question

Q19

Are there any common pushbacks from sites/IRBs around WES/WGS? [Free text]

when considering optional WES/WGS, there are requests to return results of clinical significance

Q20

Are there any particular countries where you have difficulty implementing WES/WGS? [Free text]

Excluding countries which require return of results - Taiwan also requires lists of the genes which will be analysed

Q21

Have you identified any particularly successful strategies for increasing patient uptake of WES/WGS? [Multiple choice]

Other (please specify):

Multiple choice function not working - Engaging PI, FAQ for IRB and Modifying consent wording

Q22 Which methods do you use for WES/WGS in clinical trials? [Select all that apply]	**Deep sequencing**
Q23 Do you generate WES/WGS to a CLIA standard or equivalent? [Select one]	**Respondent skipped this question**
Q24 Do you generate WES/WGS alongside other data? [select all that apply]	Other (please specify): Multiple choice not working - Targeted panel, RNA-seq and proteomics
Q25 Which data management processes do you include for WES/WGS data from clinical trials? [Select all that apply]	**Respondent skipped this question**
Q26 Is there appetite to share genomic data from clinical trials as part of cross-industry collaborations? [Select one]	**Yes – very keen**
Q27 What are your main hesitations/bottlenecks for doing WES/WGS? [Select all that apply]	**Respondent skipped this question**
Q28 Does the ability to collect WES/WGS data influence the selection of trial sites? [Choose one]	**Respondent skipped this question**
Q29 Does the ability to collect WGS data prevent basing trial sites within specific counties? [Choose one]	**Respondent skipped this question**
Q30 Do the rules around the return of results around WES/WGS specifically influence the selection of trial sites/countries?	**Respondent skipped this question**

Q31

Would easier/clearer rules around WES/WGS data collection in trials in a given country/site/jurisdiction increase the likelihood of your company basing a trial there?

Respondent skipped this question

Q32

Would your answers have changed if we had asked only about WES or WGS, rather than both? [Free text]

No

Q33

Are there any other comments or clarifications you would like to make? [Free text]

Respondent skipped this question

#10

COMPLETE

Collector:	Email Invitation 1 (Email)
Started:	Monday, June 13, 2022 3:04:31 AM
Last Modified:	Monday, June 13, 2022 3:15:39 AM
Time Spent:	00:11:07
Email:	Aparna.Chhibber@bms.com
IP Address:	165.89.114.113

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Q1

Please provide your company identifying code provided to you by Julian Arbuckle:

8871

Q2

What type of company are you representing? [Multiple choice, one answer]:

Big pharma (>10,000 employees)

Q3

What is your most common stage of data that you work on within the company? [multiple choice, one answer]

Clinical research

Q4

In broad terms, what role best describes your position at the company (e.g. statistical geneticist?) [open text]

Specimen Management/Informed Consent/Bioinformatics Research

Q5

Is your company currently using (internally or externally sourced) Next Generation Sequencing (NGS) technologies for clinical PGx studies?

Yes

Q6

How often does your company currently use NGS technologies for clinical PGx studies? [Multiple choice, choose one answer]

Widely used

Q7 For DNA sequencing, what approaches are being used? [Check all that apply]	**Whole Genome Sequencing,** **Whole Exome Sequencing**
Q8 Which indications are using NGS for clinical PGx studies at your company? [Check all that apply]	**Opt out of answering**
Q9 Which phases of clinical development have utilized NGS technologies at your company? [Check all that apply]	**Preclinical or research focused,** **Phase I,** **Phase IIa,** **Phase IIb,** **Phase III**
Q10 To what extent are you using WES/WGS in your trials? [Choose one]	**Majority of trials**
Q11 What are your main motivations for generating WES/WGS in trials? [Select all that apply]	**Biobanking data that may be hard to retrieve later,** **Ability to detect somatic mutations,** **Exploratory research into disease/new targets,** **Expansion opportunities,** **Pharmacogenetics and predicting response**
Q12 Is WES/WGS data being generated retrospectively in older completed studies? [Choose one]	**Yes, for specific trials when a specific question arises**
Q13 Is taking part in WES/WGS ever mandatory for participant inclusion into a trial? [Choose one]	**Yes, in some trials**
Q14 If you answered "Yes" to Q13, did mandatory WES/WGS cause a significant challenge to recruitment into trials? (more than any other form of genetic data collection) [Select one option]	**Yes, but minor challenges**

Q15

In general, when requesting WES/WGS in trials does it lead to reduced uptake of enrolment in the trial, or other logistical challenges? [Select one option]

No/Negligible

Q16

To what extent have the American College of Medical Genetics' guidelines for returning genomic results to participants influenced your decision to include WES/WGS in trials? [Select one option]

Not a factor

Q17

Where do you receive the most pushback around inclusion of WES/WGS in trials? [One choice]

IRBs,

Country specific laws/guidelines,

Internal – Scientific rationale

Q18

Are there any common pushbacks from patients around WES/WGS? [Free text]

None directly from patients

Q19

Are there any common pushbacks from sites/IRBs around WES/WGS? [Free text]

Respondent skipped this question

Q20

Are there any particular countries where you have difficulty implementing WES/WGS? [Free text]

Yes, China, Turkey, Japan, Denmark, Israel.

Q21

Have you identified any particularly successful strategies for increasing patient uptake of WES/WGS? [Multiple choice]

Other (please specify):
Both FAQs for IRBs and modifying consent wording

Q22

Which methods do you use for WES/WGS in clinical trials? [Select all that apply]

Deep sequencing

Q23 Do you generate WES/WGS to a CLIA standard or equivalent? [Select one]	**Never**
Q24 Do you generate WES/WGS alongside other data? [select all that apply]	Other (please specify): All of the above
Q25 Which data management processes do you include for WES/WGS data from clinical trials? [Select all that apply]	**GDPR specific checks**
Q26 Is there appetite to share genomic data from clinical trials as part of cross-industry collaborations? [Select one]	**Respondent skipped this question**
Q27 What are your main hesitations/bottlenecks for doing WES/WGS? [Select all that apply]	Other (please specify): WES is currently conducted in many trials, but where it is not, a mix of cost, sample size, and scientific justification main considerations
Q28 Does the ability to collect WES/WGS data influence the selection of trial sites? [Choose one]	**No**
Q29 Does the ability to collect WGS data prevent basing trial sites within specific counties? [Choose one]	**No**
Q30 Do the rules around the return of results around WES/WGS specifically influence the selection of trial sites/countries?	**No**
Q31 Would easier/clearer rules around WES/WGS data collection in trials in a given country/site/jurisdiction increase the likelihood of your company basing a trial there?	**It might occasionally be a factor**

Q32

Would your answers have changed if we had asked only about WES or WGS, rather than both? [Free text]

Yes, WES used far more widely than WGS in clinical trials

Q33

Are there any other comments or clarifications you would like to make? [Free text]

Answers to many questions somewhat indication-specific, and would vary if asked for a specific indication.

For #22, assume "deep sequencing" means standard depth sequencing

#11

COMPLETE

Collector:	Web Link 2 (Web Link)
Started:	Tuesday, June 14, 2022 10:00:18 PM
Last Modified:	Tuesday, June 14, 2022 10:06:57 PM
Time Spent:	00:06:38
IP Address:	66.78.209.129

Page 1

Q1

Please provide your company identifying code provided to you by Julian Arbuckle:

2276

Q2

What type of company are you representing? [Multiple choice, one answer]:

Small biotech (<1000 employees)

Q3

What is your most common stage of data that you work on within the company? [multiple choice, one answer]

Clinical research

Q4

In broad terms, what role best describes your position at the company (e.g. statistical geneticist?) [open text]

Bridging discovery and preclinical work to ensure clinical readiness of preclinical assets

Q5

Is your company currently using (internally or externally sourced) Next Generation Sequencing (NGS) technologies for clinical PGx studies?

Yes

Q6

How often does your company currently use NGS technologies for clinical PGx studies? [Multiple choice, choose one answer]

Occasionally used

Q7 For DNA sequencing, what approaches are being used? [Check all that apply]	**Whole Genome Sequencing,** **Whole Exome Sequencing,** **Targeted panels**
Q8 Which indications are using NGS for clinical PGx studies at your company? [Check all that apply]	**Cardiovascular,** **Metabolism,** **Neuroscience,** **Immunology,** **Rare disease,** **Oncology**
Q9 Which phases of clinical development have utilized NGS technologies at your company? [Check all that apply]	**Preclinical or research focused,** **Phase I,** **Phase IIa,** **Phase IIb,** **Phase III**
Q10 To what extent are you using WES/WGS in your trials? [Choose one]	**Majority of trials**
Q11 What are your main motivations for generating WES/WGS in trials? [Select all that apply]	**Exploratory research into disease/new targets,** **Pharmacogenetics and predicting response,** **Inclusion/exclusion criteria,** **Use of genomic variables for stratification/covariates in trial**
Q12 Is WES/WGS data being generated retrospectively in older completed studies? [Choose one]	**No - insufficient samples/consent etc.**
Q13 Is taking part in WES/WGS ever mandatory for participant inclusion into a trial? [Choose one]	**Yes, in some trials**

Q14

If you answered "Yes" to Q13, did mandatory WES/WGS cause a significant challenge to recruitment into trials? (more than any other form of genetic data collection) [Select one option]

NA

Q15

In general, when requesting WES/WGS in trials does it lead to reduced uptake of enrolment in the trial, or other logistical challenges? [Select one option]

Yes, to a small degree

Q16

To what extent have the American College of Medical Genetics' guidelines for returning genomic results to participants influenced your decision to include WES/WGS in trials? [Select one option]

To a large extent – increasing likelihood of WES/WGS use

Q17

Where do you receive the most pushback around inclusion of WES/WGS in trials? [One choice]

Country specific laws/guidelines,

Internal – Operations

Q18

Are there any common pushbacks from patients around WES/WGS? [Free text]

Not aware of any

Q19

Are there any common pushbacks from sites/IRBs around WES/WGS? [Free text]

Not so far

Q20

Are there any particular countries where you have difficulty implementing WES/WGS? [Free text]

In the process of expanding into Europe i.e. at present no experience outside of North America

Q21

Have you identified any particularly successful strategies for increasing patient uptake of WES/WGS? [Multiple choice]

Other (please specify):
Too early to tell

Q22 Which methods do you use for WES/WGS in clinical trials? [Select all that apply]	**Respondent skipped this question**
Q23 Do you generate WES/WGS to a CLIA standard or equivalent? [Select one]	**Always**
Q24 Do you generate WES/WGS alongside other data? [select all that apply]	**Targeted clinical genotyping/gene panels**
Q25 Which data management processes do you include for WES/WGS data from clinical trials? [Select all that apply]	**Use of GxP compliant platforms**
Q26 Is there appetite to share genomic data from clinical trials as part of cross-industry collaborations? [Select one]	**No**
Q27 What are your main hesitations/bottlenecks for doing WES/WGS? [Select all that apply]	**Local laws and regulations**
Q28 Does the ability to collect WES/WGS data influence the selection of trial sites? [Choose one]	**No**
Q29 Does the ability to collect WGS data prevent basing trial sites within specific counties? [Choose one]	**No**
Q30 Do the rules around the return of results around WES/WGS specifically influence the selection of trial sites/countries?	**No**

Q31

Would easier/clearer rules around WES/WGS data collection in trials in a given country/site/jurisdiction increase the likelihood of your company basing a trial there?

No

Q32

Would your answers have changed if we had asked only about WES or WGS, rather than both? [Free text]

No

Q33

Are there any other comments or clarifications you would like to make? [Free text]

The use of WGS in clinical trials is a very recent development and therefore only very limited experience exists to date