Wheat Fusarium Head Blight Fungicide Timing

Trial ID: 2020-WFHB02 — R.M. of Roland

Objective: The purpose of this project is to quantify the impact of fusarium head blight on the quality of harvested grain by comparing the farmer's normal fungicide application at recommended rate and timing to a fungicide application 3 to 5 days later

TRIAL INFORMATION

Location	Roland
Previous Crop	Peas
Soil Texture	Course Loams
Tillage	Zero Tillage
Planting Date	May 12, 2020
Variety	SY Rowyn
Row Spacing	7.5"
Seeding Rate	140 lbs/ac
Fungicide Product	Prosaro XTR
Rec'd App Date	July 06, 2020
Rec'd App Timing	Early Flower
3-5 Days Later	July 10, 2020
Harvest Date	August 26, 2020

PRECIPITATION†

	May	June	July	Aug	Total
Rainfall	30	47	81	27	**184**
Normal	55	78	59	79	**271**

†Growing season precipitation (mm)

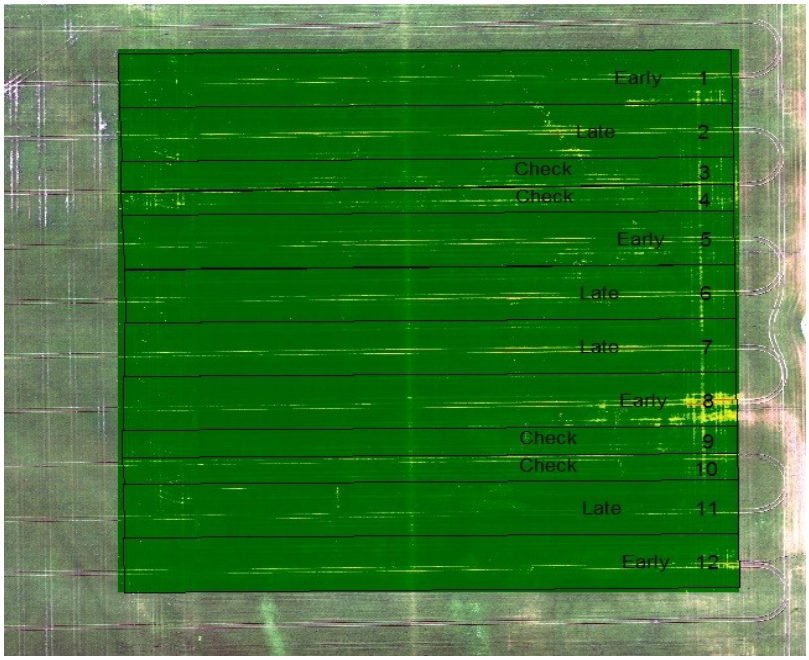
WHEAT QUALITY

	Protein	DON	TWT (kg/hL)	Falling Number
Rec'd Timing	13.7	0.0	81	353
Late Timing	13.6	0.0	81	352
Untreated	13.9	0.1	80	347

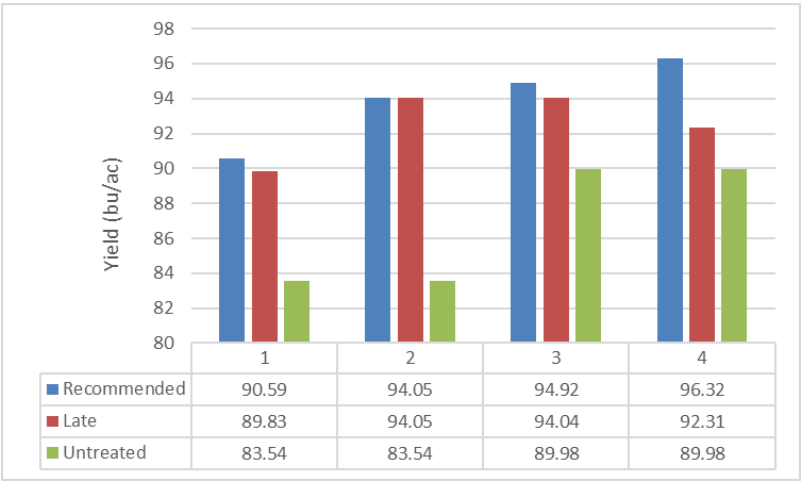
OVERALL YIELD

	Mean (bu/ac)
Rec'd Timing	94.0[A]
Late Timing	92.5[A]
Untreated	91.1[B]
P-Value	0.00365
CV	4.5%
Significance	Yes

FIELD IMAGE



STRIP YIELD



	1	2	3	4
Recommended	90.59	94.05	94.92	96.32
Late	89.83	94.05	94.04	92.31
Untreated	83.54	83.54	89.98	89.98

Summary: There was a significant yield difference between the recommended and late timing versus the untreated check for fusarium head blight fungicide applications. Wheat quality was #1 grade for CWRS. Rainfall was below normal for the entire growing season.

MCA would like to thank Tone Ag Consulting Ltd. for the research support and SGS Canada Inc. for the wheat quality analysis for this trial.

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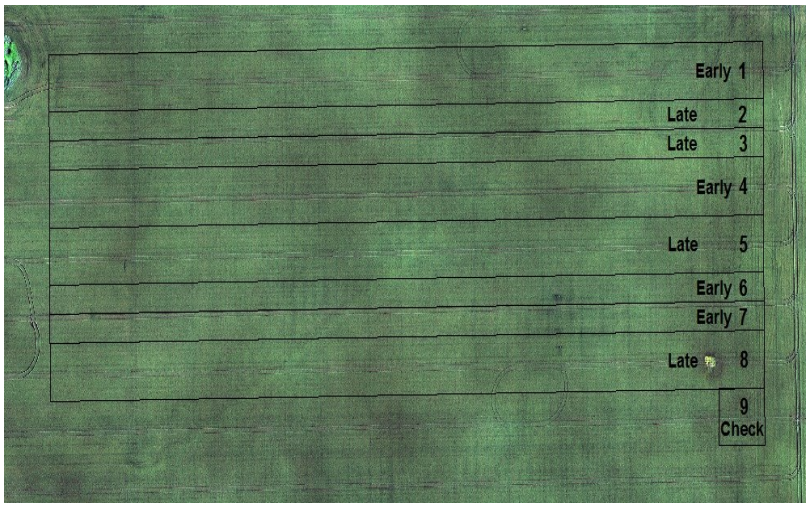
Wheat Fusarium Head Blight Fungicide Timing

Trial ID: 2020-WFHB03 — R.M. of Grey

Objective: The purpose of this project is to quantify the impact of fusarium head blight on the quality of harvested grain by comparing the farmer's normal fungicide application at recommended rate and timing to a fungicide application 3 to 5 days later

TRIAL INFORMATION	
Location	Elm Creek
Previous Crop	Canola
Soil Texture	Clay
Tillage	Zero Tillage
Planting Date	May 09, 2020
Variety	AAC Brandon
Row Spacing	7.5"
Seeding Rate	120 lbs/ac
Fungicide Product	Prosaro XTR
Rec'd App Date	July 06, 2020
Rec'd App Timing	Early Flower
3-5 Days Later	July 10, 2020
Harvest Date	August 26, 2020

FIELD IMAGE



PRECIPITATION†

	May	June	July	Aug	Total
Rainfall	29	36	66	39	**170**
Normal	55	77	60	78	**270**

†Growing season precipitation (mm)

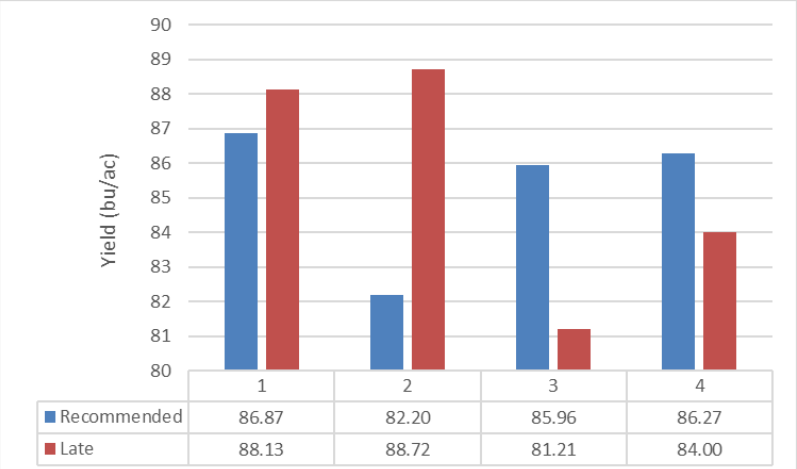
WHEAT QUALITY

	Protein	DON	TWT (kg/hL)	Falling Number
Rec'd Timing	14.5	0.0	81	349
Late Timing	14.6	0.0	81	347

OVERALL YIELD

	Mean (bu/ac)
Rec'd Timing	85.4[A]
Late Timing	85.5[A]
Difference	0.1
P-Value	0.942
CV	3.18%
Significance	No

STRIP YIELD



Summary: **There was no significant yield difference between the recommended timing and late timing for fusarium head blight fungicide timing applications. Wheat quality was consistent for all the treatments, receiving a #1 grade for CWRS. Rainfall was below normal for the entire growing season.**

MCA would like to thank Tone Ag Consulting Ltd. for the research support and SGS Canada Inc. for the wheat quality analysis for this trial.

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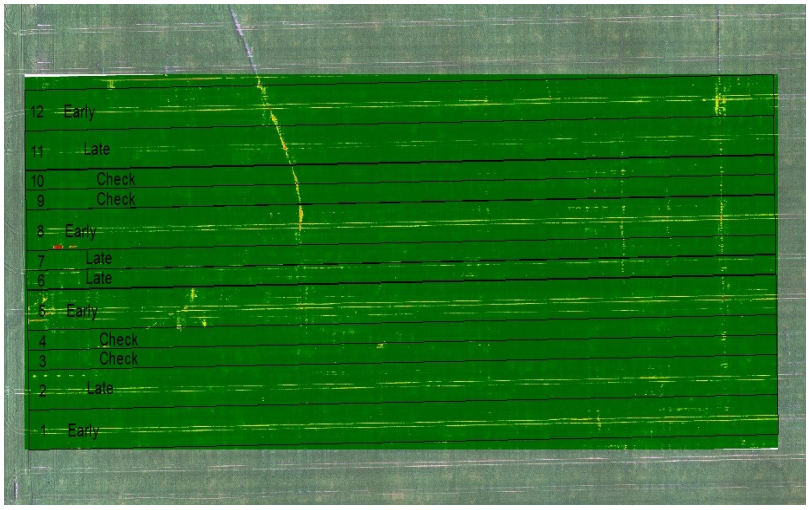
Wheat Fusarium Head Blight Fungicide Timing

Trial ID: 2020-WFHB04 — R.M. of Grey

Objective: The purpose of this project is to quantify the impact of fusarium head blight on the quality of harvested grain by comparing the farmer's normal fungicide application at recommended rate and timing to a fungicide application 3 to 5 days later

TRIAL INFORMATION	
Location	Culross
Previous Crop	Canola
Soil Texture	Clay
Tillage	Zero Tillage
Planting Date	May 13, 2020
Variety	AC Cardale
Row Spacing	10"
Seeding Rate	219 lbs/ac
Fungicide Product	Prosaro XTR
Rec'd App Date	July 06, 2020
Rec'd App Timing	Early Flower
3-5 Days Later	July 10, 2020
Harvest Date	August 22, 2020

FIELD IMAGE



PRECIPITATION†

	May	June	July	Aug	Total
Rainfall	29	36	66	39	**170**
Normal	55	77	60	78	**270**

†Growing season precipitation (mm)

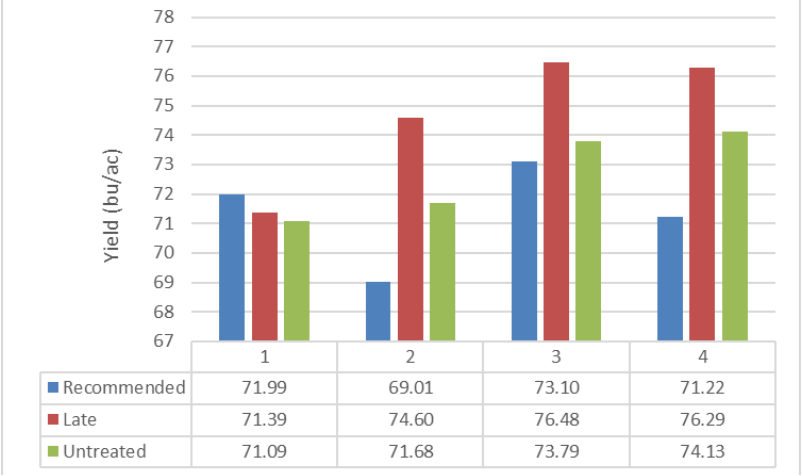
WHEAT QUALITY

	Protein	DON	TWT (kg/hL)	Falling Number
Rec'd Timing	14.0	0.1	77	354
Late Timing	13.8	0.1	77	342
Untreated	14.1	0.1	77	349

OVERALL YIELD

	Mean (bu/ac)
Rec'd Timing	71.3^{B}
Late Timing	74.7^{A}
Untreated	72.7^{AB}
P-Value	0.0443
CV	3.08%
Significance	**Yes**

STRIP YIELD



Summary: There was a significant yield difference between the late timing versus the untreated check for fusarium head blight fungicide applications. Wheat quality was rated as tough #1 grade for CWRS. Rainfall was below normal for the entire growing season.

MCA would like to thank Tone Ag Consulting Ltd. for the research support and SGS Canada Inc. for the wheat quality analysis for this trial.

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Wheat Fusarium Head Blight Fungicide Timing

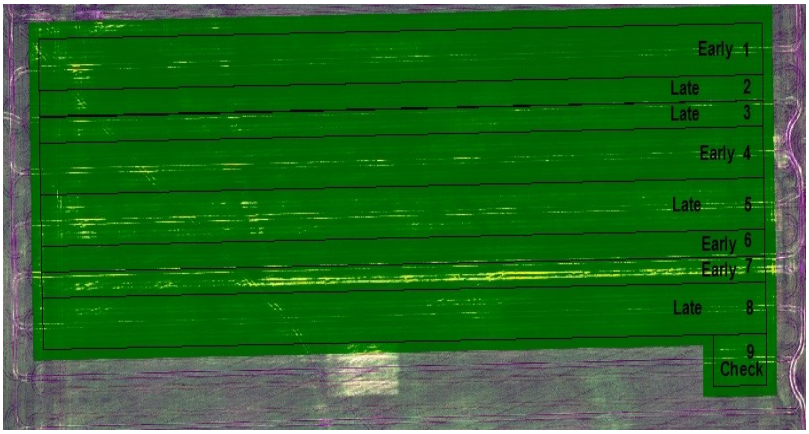
Trial ID: 2020-WFHB05 — R.M. of Morris

Objective: The purpose of this project is to quantify the impact of fusarium head blight on the quality of harvested grain by comparing the farmer's normal fungicide application at recommended rate and timing to a fungicide application 3 to 5 days later

TRIAL INFORMATION

Location	Sperling
Previous Crop	Canola
Soil Texture	Clay
Tillage	Conventional
Planting Date	May 11, 2020
Variety	AAC Brandon
Row Spacing	7.5"
Seeding Rate	140 lbs/ac
Fungicide Product	MIRAVIS Ace
Rec'd App Date	July 06, 2020
Rec'd App Timing	Early Flower
3-5 Days Later	July 10, 2020
Harvest Date	August 24, 2020

FIELD IMAGE



PRECIPITATION†

	May	June	July	Aug	Total
Rainfall	71	83	102	43	**298**
Normal	55	83	66	74	**279**

†Growing season precipitation (mm)

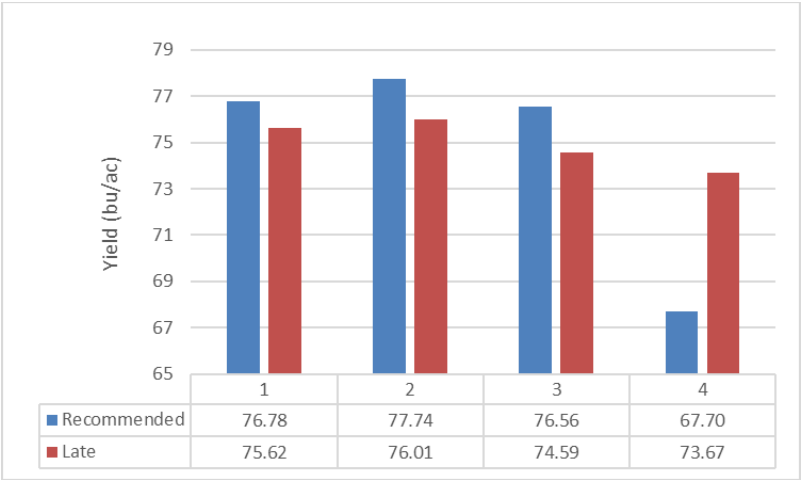
WHEAT QUALITY

	Protein	DON	TWT (kg/hL)	Falling Number
Rec'd Timing	13.5	0.0	82	356
Late Timing	13.7	0.0	81	350

OVERALL YIELD

	Mean (bu/ac)
Rec'd Timing	74.7[A]
Late Timing	75.0[A]
Difference	0.3
P-Value	0.892
CV	4.21%
Significance	No

STRIP YIELD



Summary: There was no significant yield difference between the recommended and late timing fusarium head blight fungicide applications. Wheat quality was generally #1 grade for CWRS, with two recommended samples downgraded to #2 for low HVK% (hard vitreous kernels). Rainfall was slightly above normal for the entire growing season.

MCA would like to thank Tone Ag Consulting Ltd. for the research support and SGS Canada Inc. for the wheat quality analysis for this trial.

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Wheat Fusarium Head Blight Fungicide Timing

Trial ID: 2020-WFHB06 — R.M. of Brokenhead

Objective: The purpose of this project is to quantify the impact of fusarium head blight on the quality of harvested grain by comparing the farmer's normal fungicide application at recommended rate and timing to a fungicide application 3 to 5 days later

TRIAL INFORMATION

Location	Beausejour
Previous Crop	Canola
Soil Texture	Clay
Tillage	Conventional
Planting Date	May 10, 2020
Variety	AAC Brandon
Row Spacing	10"
Seeding Rate	120 lbs/ac
Fungicide Product	Prosaro XTR
Rec'd App Date	July 06, 2020
Rec'd App Timing	Early Flower
3-5 Days Later	July 10, 2020
Harvest Date	August 25, 2020

PRECIPITATION†

	May	June	July	Aug	Total
Rainfall	11	75	44	117	**247**
Normal	57	85	68	81	**290**

†Growing season precipitation (mm)

WHEAT QUALITY

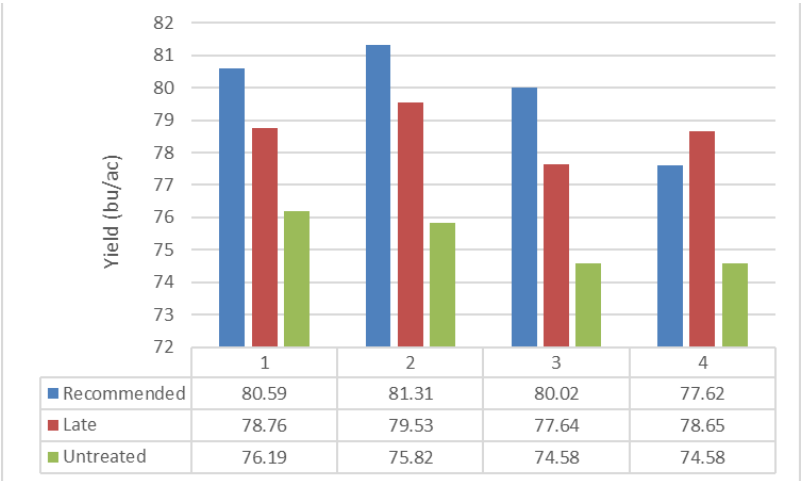
	Protein	DON	TWT (kg/hL)	Falling Number
Rec'd Timing	13.4	0.0	80	342
Late Timing	13.5	0.0	80	349
Untreated	13.5	0.0	79	354

OVERALL YIELD

	Mean (bu/ac)
Rec'd Timing	79.9[A]
Late Timing	78.6[A]
Untreated	75.3[B]
P-Value	0.000593
CV	2.91%
Significance	Yes

FIELD IMAGE

STRIP YIELD



Summary: There was a significant yield difference between the recommended and late timing versus the untreated check for fusarium head blight fungicide applications. Wheat quality was #1 grade for CWRS, except for three samples that were downgraded to #2 for low HVK % (hard vitreous kernels). Rainfall was below normal for the entire growing season.

MCA would like to thank Tone Ag Consulting Ltd. for the research support and SGS Canada Inc. for the wheat quality analysis for this trial.

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Wheat Fusarium Head Blight Fungicide Timing

Trial ID: 2020-WFHB07 — R.M. of Cartwright-Roblin

Objective: The purpose of this project is to quantify the impact of fusarium head blight on the quality of harvested grain by comparing the farmer's normal fungicide application at recommended rate and timing to a fungicide application 3 to 5 days later

TRIAL INFORMATION

Location	Cartwright
Previous Crop	Canola
Soil Texture	Clay Loams
Tillage	Zero Tillage
Planting Date	May 27, 2020
Variety	AAC Brandon
Row Spacing	12"
Seeding Rate	119 lbs/ac
Fungicide Product	Caramba
Rec'd App Date	July 10, 2020
Rec'd App Timing	Early Flower
3-5 Days Later	July 15, 2020
Harvest Date	September 10, 2020

PRECIPITATION†

	May	June	July	Aug	Total
Rainfall	60	19	131	50	**260**
Normal	80	92	54	76	**302**

†Growing season precipitation (mm)

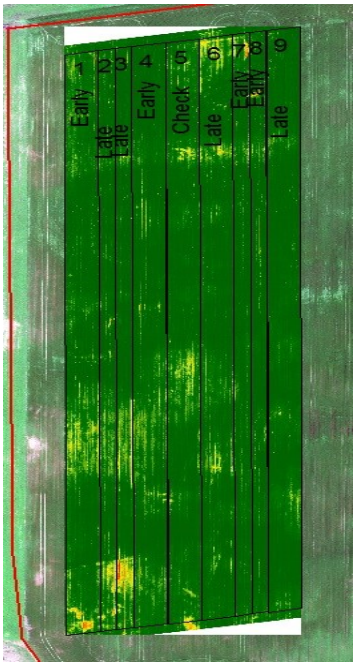
WHEAT QUALITY

	Protein	DON	TWT (kg/hL)	Falling Number
Rec'd Timing	15.5	0.5	81	289
Late Timing	15.1	0.5	80	298
Untreated	15.1	0.5	80	325

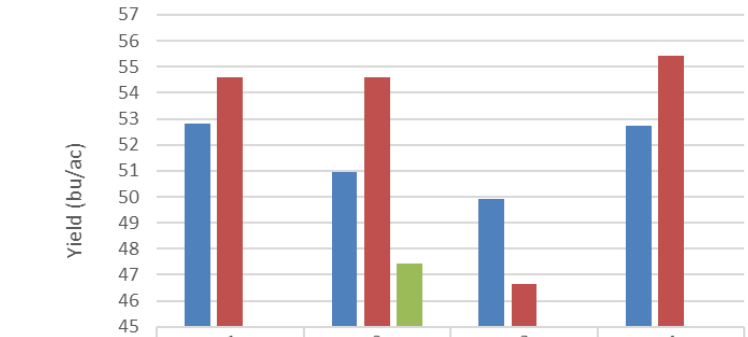
OVERALL YIELD

	Mean (bu/ac)
Rec'd Timing	51.6[A]
Late Timing	52.8[A]
Untreated (Reference)	47.4
P-Value	0.489
CV	5.62%
Significance	No

FIELD IMAGE



STRIP YIELD



	1	2	3	4
Recommended	52.81	50.94	49.92	52.73
Late	54.61	54.59	46.64	55.42
Untreated		47.42		

Summary: There was no significant yield difference between the recommended timing and late timing for fusarium head blight fungicide timing applications. Wheat quality was consistent for all the treatments, receiving a #1 grade for CWRS, with low levels of DON. Rainfall was below normal for the entire growing season.

MCA would like to thank Tone Ag Consulting Ltd. for the research support and SGS Canada Inc. for the wheat quality analysis for this trial.

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