

PR#: 13819

Deviation No.:D-2021-0204

Record Status: Deviation Investigation in Progress

## 基本信息 General Information

厂区 Division: Innovent Biologics (Su Zhou) Co., Ltd

发起人 Originator: 江, 煜章(PID-000289)

发起日期 Date Opened: 2021.04.28

简短描述 Short Description:

M1b DS1 膜包前压力高, 程序报警并HOLD, The high pressure in front of the membrane package causes the program alarm and hold

到期日期 Date Due: 2021.07.09

关闭日期 Date Closed:

## 偏差信息 Deviation Information

发现人 Discovery By: 刘希雨05020036

发现日期 Discovery On: 2021.04.27

汇报人 Report By: 刘希雨05020036

汇报日期 Report On: 2021.04.27

发生部门 Occurred Department: M1b DS1

汇报部门 Report Department: M1b DS1

偏差描述 Deviation Description:

2021.04.27 12:56 生产人员 (工号: 05020036, 20000222) 在细胞培养间 (26D08) 和离心收获间 (26D09) 进行IBI308 (二代细胞株) DS2103013 批次生产收获时, 发现一级膜包前压力过高, PI-T0111-02发生HI\_HI\_ALM报警导致收获程序 (HV\_IBI308\_NEW\_HARVEST\_PR) (Batch ID: DS2103013-020104270844) HOLD, 在14:31将收获程序abort, 收获程序结束。因与正常收获程序不一致, 故发起偏差调查。

描述的附件 Description attachment:

是否及时上报? Reporting in Time?: Yes

未及时上报的理由 Reason for not in Time:

NA

已采取的即时措施 Immediately Action Taken:

04/28/2021 04:07 PM (GMT+8:00) added by 煜章 江 (PID-000289):

出现报警导致收获程序HOLD后, 在上报上级领导、QA、MST后, 经会议讨论, 于2021.04.27 14:31 将收获程序abort, 以结束收获程序。(见附件1.膜包压力过高的处理) MFG2021.04.27

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04/28/2021 11:20 AM (GMT+8:00) added by 煜章 江 (PID-000289):

出现报警导致收获程序HOLD后, 于2021.04.27 14:31将收获程序abort, 以结束收获程序。(见附件1.膜包压力过高的处理) MFG 2021.04.27

即时措施附件 Immediately Action Attachment:

附件1.膜包压力过高的处理.jpg

厂房设施名称 Facility Name:

M1b

产品所属阶段 Product Phase:

Clinical

## 初步影响/风险评估 Initial Impact/Risk Assessment

产品影响评估 Product Impact Assessment:

三级除菌过滤器主要目的是降低后续工序微生物负荷, 偏差发生后, 三级过滤器完整性检测通过, (见附件2.三级过滤器完整性检测结果) 说明过滤后的澄清过滤收集液的微生物限度不会受到影响, 基于此, 初步评估对产品质量无影响。

生产/检测的影响评估 Production/Testing Impact Assessment:

- 出现报警导致收获程序HOLD后, 经会议讨论, 于2021.04.27 14:31 将收获程序abort后, 收获程序正常结束。通过澄清收集液体积, 蛋白含量, 亲和层析柱体积, 经下游MST计算得出的亲和进行3个cycle理论载量为 (澄清收集液体积\*蛋白含量/cycle数/亲和层析柱体积)  $2527.74 \times 7.97 / 3 / 179.86 = 37.3$ , 符合纯化亲和层析上样载量 (23.1-53.2g/L)。因此对后续生产无影响。
- 因膜包堵塞原因收获罐 (MFG-M1b2-064) 澄清收集液液位低于正常水平, 约为2500kg, 纯化正在上第2个cycle样时, 上游操作人

# 偏差报告 Deviation Report

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员 (20002811,05020026) 发现液位即将要低于取样口 (液位已降至950Kg左右), 立即联系纯化告知收获罐需留有800KG的液位取样, 后经与纯化人员反复沟通, 为了防止液位太低取不到样品, 上游操作人员于10:35紧急提前取了2袋样品备用, 且纯化操作人员于10:37结束第2个cycle。程序结束后, 上游操作人员 (20002811,05020026) 发现液位为801KG, 仍可取样, 且与MST沟通, 前面2袋备用样品不具有代表性, 于是按照《信迪利单抗注射液二代细胞株M1b 3000L上游工艺规程》(PFD00172-03) 要求, 于15:25在第3个cycle前重新取样2袋。(后续会建立行动项对提前取出的2袋备用样品进行废弃处理。)

其他影响评估描述 Other Impact Assessment Description:

本次偏差中, 三级滤器堵塞, 未执行缓冲液顶洗步骤, 导致约400kg (其中缓冲罐汇总约100kg, 膜包死体积约260kg) 料液损失, 工艺收率相较于工程批会有所降低。对工艺验证的具体影响需要进一步调查评估。

初步影响评估附件 Initial Impact Assessment Attachment:

附件2.三级滤器完整性检测结果.docx

## 偏差分级 Deviation Classification

偏差严重性 Deviation Severity:

- 1.三级除菌滤器主要目的是降低后续工序微生物负荷, 偏差发生后, 三级滤器完整性检测通过, (见附件2.三级滤器完整性检测结果) 说明过滤后的澄清过滤收集液的微生物限度不会受到影响, 基于此, 初步评估对产品质量无影响。
- 2.出现报警导致收获程序HOLD后, 经会议讨论, 于2021.04.27 14:31 将收获程序abort后, 收获程序正常结束。通过澄清收集液体积, 蛋白含量, 亲和层析柱体积, 经下游MST计算得出的亲和进行3个cycle理论载量为 (澄清收集液体积\*蛋白含量/cycle数/亲和层析柱体积)  $2527.74 \times 7.97/3/179.86 = 37.3$ , 符合纯化亲和层析上样载量 (23.1-53.2g/L)。因此对后续生产无影响。
- 3.因膜包堵塞原因收获罐 (MFG-M1b2-064) 澄清收集液液位低于正常水平, 约为2500kg, 纯化正在上第2个cycle样时, 上游操作人员 (20002811,05020026) 发现液位即将要低于取样口 (液位已降至950Kg左右), 立即联系纯化告知收获罐需留有800KG的液位取样, 后经与纯化人员反复沟通, 为了防止液位太低取不到样品, 上游操作人员于10:35紧急提前取了2袋样品备用, 且纯化操作人员于10:37结束第2个cycle。程序结束后, 上游操作人员 (20002811,05020026) 发现液位为801KG, 仍可取样, 且与MST沟通, 前面2袋备用样品不具有代表性, 于是按照《信迪利单抗注射液二代细胞株M1b 3000L上游工艺规程》(PFD00172-03) 要求, 于15:25在第3个cycle前重新取样2袋。(后续会建立行动项对提前取出的2袋备用样品进行废弃处理。)
- 4.本次偏差中, 三级滤器堵塞, 未执行缓冲液顶洗步骤, 导致约400kg (其中缓冲罐汇总约100kg, 膜包死体积约260kg) 料液损失, 工艺收率相较于工程批会有所降低。对工艺验证的具体影响需要进一步调查评估。

偏差发生率 Reoccurrence Probability of Deviation:

过去12个月未发生类似缺陷 (搜索关键词: 膜包, 压力, 报警)

偏差分级 Deviation Classification: Minor

分级的理由 Reason for Classification:

04/29/2021 05:41 PM (GMT+8:00) added by 怡菁 王 (PID-000230):

该偏差对产品质量未造成影响, 且过去12个月未发生类似缺陷, 故定为次要偏差。

是否需要调查? Investigation Required?: Yes

主调查人 Lead investigator: 周, 小华

不需要调查的理由 Reason for not Investigation:

## 调查总结&根本原因分析 Investigation & RCA

调查总结 Investigation Summary:

调查附件 Investigation Attachments:

根本原因分析 Root Cause Analysis:

根本原因分析附件 Root Cause Analysis Attachment:

偏差报告

Deviation Report

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原因描述 Cause Description:

原因分类 Cause Category

原因子分类 Cause Sub-Category

原因归属部门 Cause Department

缺陷描述 Defect Description:  
生产人员在细胞培养间（26D08）和离心收获间（26D09）进行IBI308（二代细胞株）DS2103013 批次生产收获时，发现一级膜包前压力过高，PI-T0111-02发生HI\_HI\_ALM报警导致收获程序（HV\_IBI308\_NEW\_HARVEST\_PR）（Batch ID: DS2103013-020104270844）HOLD，在14:31将收获程序abort，收获程序结束。因与正常收获程序不一致，故发起偏差调查。

缺陷类型分类 Defect Category

缺陷类型子分类 Defect Sub-Category

Production/Process

Operation

是否是重复偏差 Repeat Deviation? :

判定重复偏差的原因 Justification for Repeat Deviation:

重复偏差的原因描述 Reason of Repeat Deviation Description:

相关的重复偏差 Repeat Deviation Records		简短描述 Short Description	Record Status
PR#	deviation#		

最终影响/风险评估 Final Impact/Risk Assessment

对产品质量的影响 Impact on Product Quality:

对其他批次的影响 Impact on Other Batches:

对系统/设备的影响 Impact on System/Equipment:

对验证状态的影响 Impact on Validation State:

对产品注册的影响 Impact on Product Registration:

对法规符合性的影响 Impact on Regulation Compliance:

对稳定性的影响 Impact on Stability:

对其他方面的影响 Impact on Other Aspects:

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受影响的部门 Impact Departments:

影响/风险评估附件 Impact/Risk Assessment Attachment:

受影响的产品信息 Impacted Product Information

产品最终处置建议 Product Disposition Proposal:

产品名称 Product Name:信迪利单抗注射液M1b 3000L原液（二代细胞株）

产品代码 Product Code

产品批号 Batch No.:

数量 Quantity

处理决定 Disposition

DS01-308B-2

DS2103013

NA

受影响的物料信息 Impacted Material Information

物料名称 Material Name:Other

物料代码 Product Code

批号 Batch No.:

数量 Quantity

Other

物料名称 Material Name:Other

物料代码 Product Code

批号 Batch No.:

数量 Quantity

Other

受影响的溶液信息 Impacted Media/Buffer Information

溶液名称 Media/Buffer Name:

溶液代码 Media/Buffer Code:

批号 Batch No.:

数量 Quantity:

受影响的设备信息 Impacted Equipment Information

设备名称 Equipment Name:

设备代码 Equipment Code

偏差处理措施 Deviation Action Items

PR#:	13905		
责任人 Assigned To:	江, 煜章(PID-000289)	部门 Department:	M1b DS1
截止日期 Date Due:	2021.05.06	完成日期 Completed Date:	2021.05.03
确认人 Verified By:	王, 杨晨(PID-000263)	确认日期 Verified On:	2021.05.05

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## 行动项详细描述 Action Description:

经与MST沟通确认, 前面2袋备用样品不具有代表性, 由生产人员将前面取出的2袋样品倒入通向灭活罐的水池处理。

PR#: 14251

责任人 Assigned To: 姜, 润滢(PID-000074)

部门 Department: MST

截止日期 Date Due: 2021.05.17

完成日期 Completed Date: 2021.05.16

确认人 Verified By: 王, 杨晨(PID-000263)

确认日期 Verified On: 2021.05.31

## 行动项详细描述 Action Description:

为降低三级滤器堵塞风险, 增加澄清过滤工序收率, 在PPQ3生产过程中, 发起变更, 并联一个三级滤器, 以增加三级滤器总面积。

## 纠正信息 Correction Information

PR#:

责任人 Assigned To:

部门 Department:

截止日期 Date Due:

完成日期 Completed Date:

确认人 Verified By:

确认日期 Verified On:

## 行动项详细描述 Action Description:

## 纠正与预防措施 CAPA

PR#:

责任人 Assigned To:

部门 Department:

截止日期 Date Due:

## 行动项详细描述 Action Description:

## 附件 File Attachments

## 关联记录 Reference Records

PR#	Record Type	简短描述 Short Description	Record Status
13949	Urgent Change Control	M1b生产1线 PH_DF_TREAT phase FQ_SP3上限参数修改 High limit revise of FQ_SP3 in phase PH_DF_TREAT.	Closed-Done

## 相关子记录 Related children

PR#	Record Type	简短描述 Short Description	Record Status
13905	Deviation Action Items	提前取出备用样品的处理 Disposal of spare samples taken out in advance	Closed-Done

## 偏差报告 Deviation Report

PR#:	13819		Deviation No.:D-2021-0204
Record Status:	Deviation Investigation in Progress		
14251	Deviation Action Items	发起变更，在信迪利单抗二代细胞株PPQ3澄清过滤并联一个三级滤器 Initiate CCR and adding another third filter in clarification	Closed-Done
15168	Interim Investigation Report	D-2021-0204第1次阶段性报告 first periodic report of D-2021-0204	Closed-Done

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## Initial Approval

### QA Initial Review

Area QA Initial Reviewed By:	王, 杨晨	Area QA Initial Reviewed On:	2021.04.28 16:18
Classify Completed By:	王, 怡菁	Classify Completed On:	2021.04.29 17:44

### Department Initial Review

Department Leader 1 Reviewed By:	康, 云	Department Leader 1 Reviewed On:	2021.04.29 18:45
Department Leader 2 Reviewed By:		Department Leader 2 Reviewed On:	
Department Leader 3 Reviewed By:		Department Leader 3 Reviewed On:	
Department Leader 4 Reviewed By:		Department Leader 4 Reviewed On:	
Department Leader 5 Reviewed By:		Department Leader 5 Reviewed On:	
Area QA Leader Reviewed By:	代, 圆圆	Area QA Leader Reviewed On:	2021.04.29 18:16

### Quality Initial Approval

Quality Approver 1 Approved By:	管, 国兴	Quality Approver 1 Approved On:	2021.04.29 19:12
Quality Approver 2 Approved By:		Quality Approver 2 Approved On:	
Quality Approver 3 Approved By:		Quality Approver 3 Approved On:	

## Final Approval

### QA Final Review

QA Final Reviewed By:	QA Final Reviewed On:
-----------------------	-----------------------

### Investigator Final Review

QA Representative Reviewed By:	QA Representative Reviewed On:
Investigator 1 Reviewed By:	Investigator 1 Reviewed On:
Investigator 2 Reviewed By:	Investigator 2 Reviewed On:
Investigator 3 Reviewed By:	Investigator 3 Reviewed On:
Investigator 4 Reviewed By:	Investigator 4 Reviewed On:
Investigator 5 Reviewed By:	Investigator 5 Reviewed On:
Investigator 6 Reviewed By:	Investigator 6 Reviewed On:
Investigator 7 Reviewed By:	Investigator 7 Reviewed On:
Investigator 8 Reviewed By:	Investigator 8 Reviewed On:

### Department Final Approval

Department Leader 1 Final Approved By:	Department Leader 1 Final Approved On:
Department Leader 2 Final Approved By:	Department Leader 2 Final Approved On:
Department Leader 3 Final Approved By:	Department Leader 3 Final Approved On:
Department Leader 4 Final Approved By:	Department Leader 4 Final Approved On:
Department Leader 5 Final Approved By:	Department Leader 5 Final Approved On:

### Quality Final Approval

Quality Approver 1 Final Approved By:	Quality Approver 1 Final Approved On:
Quality Approver 2 Final Approved By:	Quality Approver 2 Final Approved On:

偏差报告  
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Quality Approver 3 Final Approved By:

Quality Approver 3 Final Approved On:

**Product Final Disposition**

Disposition Proposed By:

Disposition Proposed On:

Proposal Reviewed By:

Proposal Reviewed On:

Product Disposition Approved By:

Product Disposition Approved On: