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| DISTRICT ADDRESS AND PHONE NUMBER | DATE(S) OF INSPECTION |
| 19701 Fairchild | 10/5/2020-10/22/2020* |
| Irvine, CA 92612-2445 | FEI NUMBER |
| (949)608-2900 Fax: (949)608-4417 | 3013316698 |
| NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED | |
| Paul G. Kagan, Managing Director | |
| FIRM NAME | STREET ADDRESS |
| MedisourceRx | 10525 Humbolt St |
| CITY, STATE, ZIP CODE, COUNTRY | TYPE ESTABLISHMENT INSPECTED |
| Los Alamitos, CA 90720-5401 | Outsourcing Facility |

This document lists observations made by the FDA representative(s) during the inspection of your facility. They are inspectional observations, and do not represent a final Agency determination regarding your compliance. If you have an objection regarding an observation, or have implemented, or plan to implement, corrective action in response to an observation, you may discuss the objection or action with the FDA representative(s) during the inspection or submit this information to FDA at the address above. If you have any questions, please contact FDA at the phone number and address above.

DURING AN INSPECTION OF YOUR FIRM I OBSERVED:

Quality System

OBSERVATION 1

There is a failure to thoroughly review any unexplained discrepancy whether or not the batch has been already distributed.

Specifically, major defects found in 100% visual inspection process from the drug products were not fully investigated. This is a repeat observation.

- A. No identification was performed on observed particles from multiple drug product batches. For example,
 - Glutathione lot (b) (4) had 1 vial containing unknown particles.
 - Glutathione lot (b) (4) had 3 vials containing unknown particles.
 - Glutathione lot (b) (4) had 2 vials containing unknown particles.
 - Glutathione lot (b) (4) had 2 vials containing unknown particles.
 - Aviptadil lot (b) (4) had 2 syringes containing unknown particles.

B. The investigation for media fill lots with particulate counts that exceeded the action limit of [10] % is not adequate. Deviation-20-002 attributed the observed unknown particles to possible aggregate from (b) (4) media. However, such conclusion was not confirmed through additional test or examination. For example,

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| Paul G. Kagan, Managing Director | STREET ADDRESS |
| Paul G. Kagan, Managing Director | STREET ADDRESS 10525 Humbolt St |
| | |

- Syringe media fill lot (b) (4) showed 28 units containing unknown particles (***)% of total units inspected).
- C. No effort was made to identify the observed particles in media fill vial product lots. For example,
 - Vial lot (b) (4) showed 4 vials containing unknown particles.
 - Vial lot (b) (4) showed 4 vials containing unknown particles.
 - Vial lot (b) (4) showed 1 vial containing unknown particles.

In addition, the 60(4) % alert/action limits established for major defects in 100% visual inspection of the drug product and the discontinuation of your (b) (4) inspection in your drug product release requirement are not justified.

Manufacturing System

OBSERVATION 2

Procedures designed to prevent microbiological contamination of drug products purporting to be sterile did not include adequate validation of the aseptic and sterilization process.

Specifically,

- A. Not all media fill units from aseptic process simulations carried out in Nov2019 for syringes and Feb2020 for vials were incubated and examined for turbidity. For example,
 - Lot (b) (4): (b) (4) syringes were generated, only (b) (4) syringes were incubated.
 - Lot (b) (4): (b) (4) syringes were generated, only (b) (4) syringes were incubated.

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PAGE 2 of 6 PAGES INSPECTIONAL OBSERVATIONS FORM FDA 483 (09/08) PREVIOUS EDITION OBSOLETE

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| MedisourceRx | | 10525 Humbolt St | | | |
| | CA 90720-5401 | Outsourcing Facility | | | |
| - Lot (b) (4 |): (b) (4) syringes were generated, only (b) (4)): (b) (4) vials were generated, only (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c | als were incuba | ated. | I. | |
| | | | | | |
| - Lot (b) (4 |): (b)(4) vials were generated, only (b)(4) via | ais were incuba | ated. | | V ₁ 25 20 N° 28MeV |
| (b) (4) in | B. Not all media fill units were incubated (b) (4) for turbidity evaluation. For example, during (b) (4) for operator using media fill lot (b) (4) in June 2020 and operator using media fill (b) (4) in June 2020 and operator using media fill (b) (4) in June 2020 and operator using media fill (b) (4) or while vials of the control of turbidity evaluation. For example, during (b) (4) (b) (4) in June 2020 and operator using media fill (b) (4) or while vials or vials of turbidity evaluation. For example, during (b) (4) (b) (4) in June 2020 and operator using media fill (b) (4) or while vials or v | | | sing media fill lot | |
| | C. Maximum number of operators permitted to be present ISO 7 clean room during aseptic sterile preparation of drug product has not been justified. Your firm allows up to people in ISO7 fill room, which is not supported by media fill studies. | | | | |
| D. There is no (b) (4) limit established and measured for each lot of sterile drug product produced from non-sterile bulk drug substance. | | | | produced from | |
| | | | | | |
| OBSERVATION Procedures designe followed. | 3 d to prevent microbiological contaminatio | n of drug prod | ucts purpo | rting to be sterile are | not written and |
| Specifically, | | | | | |
| arms were obs | and filling process of Glutathione drug perved resting on the ISO5 (b) (4) hood bench a scissor that was placed on the ISO5 (b) (4) | h. The same of | perator ope | ened packages of steri | le vials and |
| SEE REVERSE OF THIS PAGE | EMPLOYEE(S) SIGNATURE Liming Zhang, Investigator | | | Liming Zhang Investigation Signed 6y 2001400144 Date Signed 10-22-2020 | DATE ISSUED 10/22/2020 |

INSPECTIONAL OBSERVATIONS

FORM FDA 483 (09/08)

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PAGE 3 of 6 PAGES

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| NAME AND TITLE OF INDIVIDUA | AL TO WHOM REPORT ISSUED | | 1 | | |
| | n, Managing Director | | | | |
| MedisourceRx | street address 10525 Hu | | mbolt St | | |
| CITY, STATE, ZIP CODE, COUN | TRY | TYPE ESTABLISHMENT INSPECTED | | | |
| Los Alamitos, | CA 90720-5401 | Outsourcing Facility | | | |
| B. The surface microbial sampling procedure, SOP-LAB-006, does not provide instruction on the specific sampling locations for personnel monitoring. For example, the in-use EM monitoring form, PPC-FRM-002.14, requires primary operator's (b) (4) and (b) (4) be sampled, it is not clear which areas of (b) (4) or (b) (4) samples shall be taken. On 10/6/2020 after the completion of Glutathione batch (b) (4) filling, it was observed that the back of the primary operator's (b) (4) was sampled. There is no justification why the back of the (b) (4) is considered more relevant than the front of the (b) (4) which directly faces the sterile filling operation. | | | | | equires primary en. On 10/6/2020 ary operator's |
| OBSERVATION Written production | 4 and process control procedures are not do | cumented at t | he time of p | erformance. | |
| Specifically, | | | | | |
| A. (b) (4) of your firm's drug product requires (b) (4) pump to be set to (b) (4) rpm, the actual speed used during product (b) (4) was not documented in batch production record. B. Glutathione injection drug product fill volume test results were not documented in the batch production records. | | | | | |
| 2.4 | 5 tion and control records are deficient in that g and specifications. | at they do not | include con | nplete manufacturing, | control, |
| Specifically, | | | | | |
| A. There is no requirement for (b) (4) content test as part of Glutathione (b) (4) drug product release specification. | | | | | |
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FORM FDA 483 (09/08)

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PAGE 4 of 6 PAGES

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| B. There is no instruction in master batch records for both the compounded drug products shall be protected before filling operation. | |

C. The batch production record review checklist does not include QA evaluation of environmental monitoring test results (i.e. viable and non-viable test).

OBSERVATION 6

Written procedures are not established for the cleaning and maintenance of equipment, including utensils, used in the manufacture, processing, packing or holding of a drug product.

Specifically, the cleaning procedure for mixing stirrer that is used to compound multiple drug products has not been evaluated to ensure there is no carry over from one API to the other in the mixing process.

Material System

OBSERVATION 7

Establishment of the reliability of the component supplier's report of analyses is deficient in that the test results are not appropriately validated at appropriate intervals.

Specifically, active drug substance supplier qualification does not include verification of all relevant test results against the manufacturer's specifications. For example, the firm only tested assay, microbial counts, and endotoxin level for Glutathione API. No other test results on manufacturer's COA, such as specific optical rotation, related substances, chlorides, sulfates, ammonium, iron, heavy metals, loss on drying, etc., were verified.

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FORM FDA 483 (09/08) PREVIOUS EDITION OBSOLETE INSPECTIONAL OBSERVATIONS PAGE 5 of 6 PAGES

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INSPECTIONAL OBSERVATIONS

FORM FDA 483 (09/08)

PREVIOUS EDITION OBSOLETE

PAGE 6 of 6 PAGES

The observations of objectionable conditions and practices listed on the front of this form are reported:

- 1. Pursuant to Section 704(b) of the Federal Food, Drug and Cosmetic Act, or
- 2. To assist firms inspected in complying with the Acts and regulations enforced by the Food and Drug Administration.

Section 704(b) of the Federal Food, Drug, and Cosmetic Act (21 USC 374(b)) provides:

"Upon completion of any such inspection of a factory, warehouse, consulting laboratory, or other establishment, and prior to leaving the premises, the officer or employee making the inspection shall give to the owner, operator, or agent in charge a report in writing setting forth any conditions or practices observed by him which, in his judgment, indicate that any food, drug, device, or cosmetic in such establishment (1) consists in whole or in part of any filthy, putrid, or decomposed substance, or (2) has been prepared, packed, or held under insanitary conditions whereby it may have become contaminated with filth, or whereby it may have been rendered injurious to health. A copy of such report shall be sent promptly to the Secretary."