COMPLIANCE INSIGHT, INC

Insight beyond Regulations ™

Compliance Insight, Inc.
497 Circle Freeway Dr., Suite 230
Cincinnati, Ohio 45246
513-860-3512
www.compliance-insight.com

certified WBENC WOMEN'S BUSINESS ENTERPRISE

FDA Requirements

FDA 要求

Post-Approval of Medical Devices

医疗器械审批后

COMPLIANCE INSIGHT, INC

Approved, Now What?
已批准，现在怎么办?

Elements required for the lifecycle of the medical device
医疗器械全生命周期所需的要素

Quality Management System (QMS)

质量管理体系（QMS）

- Quality Manual - is a comprehensive document that outlines an organization's quality management system (QMS). It describes the policies, processes, and procedures implemented to ensure the delivery of high-quality products and services

  质量手册 - 是一份全面的文件，概述了组织的质量管理体系（QMS)。它描述了为确保提供高质量的产品和服务而实施的政策、流程和程序

- Design controls 设计控制

COMPLIANCE INSIGHT, INC

- Production and process controls
  生产和过程控制
- Complaint handling
  投诉处理
- CAPA
  纠正措施和预防措施
- Internal audits
  内部审计
- Management review
  管理评审
- Unique Device Identifier (UDI)
  唯一设备标识符 (UDI)

COMPLIANCE INSIGHT, INC

FDA’s Unique Device Identifier (UDI)

FDA 的唯一设备标识符 (UDI)

The FDA's Unique Device Identifier (UDI) is a system designed to uniquely identify medical devices sold in the United States. It consists of two parts:

FDA 的唯一设备标识符 (UDI) 是一种用于唯一标识在美国销售的医疗器械的系统。它由两部分组成：

- Device Identifier (DI): A fixed portion that identifies the labeler and the specific version or model of the device.

  设备标识符 (DI)：用于识别标签者和设备的具体版本或型号的固定部分。

- Production Identifier (PI): A variable portion that includes details like the lot or batch number, serial number, expiration date, or manufacturing date.

  生产标识符 (PI)：包含批号、序列号、有效期或制造日期等详细信息的可变部分。

COMPLIANCE INSIGHT, INC

The UDI is required to appear on device labels and packages in both plain text and machine-readable formats. Additionally, device information must be submitted to the Global Unique Device Identification Database (GUDID), which is accessible to the public. This system helps improve patient safety, enhance post-market surveillance, and reduce medical errors. It also supports better management of device recalls and fosters innovation in medical devices.

UDI 必须以纯文本和机器可读格式显示在设备标签和包装上。此外，设备信息必须提交给全球唯一设备标识数据库 (GUDID)，该数据库可供公众访问。该系统有助于提高患者安全性、加强上市后监督并减少医疗错误。它还支持更好地管理设备召回并促进医疗设备的创新。

COMPLIANCE INSIGHT, INC

Approved, Now What?
已批准，现在怎么办?

Elements required for the lifecycle of the medical device

医疗器械全生命周期所需的要素

Risk Management

Key Activities (5):

风险管理关键活动:

1. Hazard identification and risk analysis
   危害识别和风险分析
2. Risk evaluation and control measures
   风险评估及控制措施

COMPLIANCE INSIGHT, INC

3. Residual risk assessment

残留风险评估

4. Benefit-risk analysis

效益风险分析

5. Risk management file maintenance

风险管理文件维护

COMPLIANCE INSIGHT, INC

Elements required for the lifecycle of the medical device

医疗器械全生命周期所需的要素

- Document and Record Control ensures traceability, compliance, and data integrity
  文件和记录控制确保可追溯性、合规性和数据完整性

Requirements:

要求:

  - Maintain Design History File (DHF), Device Master Record (DMR), and Device History Record (DHR)
    维护设计历史文件 (DHF)、设备主记录 (DMR) 和设备历史记录 (DHR)
  - Change control and versioning
    变更控制和版本控制
  - Record retention policies based on regulatory jurisdiction (often 2–10+ years)
    根据监管管辖范围制定的保留政策（通常为 2 至 10 年以上

COMPLIANCE INSIGHT, INC

Elements required for the lifecycle of the medical device

医疗器械全生命周期所需的要素

- Supply Chain and Vendor Management
  供应链和供应商管理

Effective oversight of outsourced activities is crucial for maintaining device quality.

有效监督外包活动对于维持设备质量至关重要。

COMPLIANCE INSIGHT, INC

- Key Components of Supplier Management include:
- 关键组件：
  - Supplier qualification and risk assessment
    供应商资格及风险评估
  - Quality agreements
    质量协议
  - Performance monitoring and audits
    绩效监控和审计
  - Incoming inspection and control
    进货检验和控制
  - Cybersecurity and Software Maintenance (if applicable)
    网络安全和软件维护（如适用）

Elements required for the lifecycle of the medical device

医疗器械全生命周期所需的要素

Training and Competency

培训与能力

- Personnel must be trained and competent in tasks affecting product quality and compliance.

  人员必须接受培训并胜任影响产品质量和合规性的任务。

COMPLIANCE INSIGHT, INC

- Documented training plans
  记录培训计划

- Job-specific training and effectiveness checks
  特定工作培训和效果检查

- Training on updates (SOPs, regulations, changes)
  更新培训（SOP、法规、变更）

Elements required for the lifecycle of the medical device

医疗器械全生命周期所需的要素

Cybersecurity and Software Maintenance (if applicable)

网络安全和软件维护（如适用）

- For devices involving software, apps, or digital connectivity

  主要法规/指南：

- Key Regulations/Guidelines: 主要法规/指南：
  - FDA Guidance on Software Validation (for production and QMS software)
    FDA 软件验证指南（针对生产和 QMS 软件）
  - Cybersecurity for Networked Devices (FDA, NIST, IMDRF)
    联网设备的网络安全（FDA、NIST、IMDRF）
- Best Practices: 最佳实践：
  - Secure software development lifecycle (SSDLC)
    安全软件开发生命周期 (SSDLC)
  - Patch management
    补丁管理
  - Vulnerability scanning and incident response
    漏洞扫描和事件响应

COMPLIANCE INSIGHT, INC

Postmarket Surveillance
上市后监督

The FDA's post market processes for medical devices are designed to ensure ongoing safety and effectiveness once the devices are on the market.

FDA 的医疗器械上市后流程旨在确保医疗器械上市后的持续安全性和有效性。

These 7 key components are also FDA requirements companies and for products post-approval. Here are some key components:

这七个关键组成部分也是 FDA 对公司和产品在批准后的要求。以下是一些关键组成部分：

- Medical Device Reporting
  医疗器械报告
- Post Market Surveillance Studies
  上市后监测研究

COMPLIANCE INSIGHT, INC

- Post-Approval Studies
  上市后研究
- Device Tracking
  设备追踪
- Recalls and Safety Alerts
  召回和安全警报
- Cybersecurity Management
  网络安全管理
- FDA Facility Inspections
  FDA 设施检查

COMPLIANCE INSIGHT, INC

- **Medical Device Reporting (MDR)**: Manufacturers, importers, and user facilities must report any device-related adverse events, malfunctions, or serious injuries to the FDA.

  医疗器械报告 (MDR)：制造商、进口商和用户机构必须向 FDA 报告任何与设备相关的不良事件、故障或严重伤害。

- **PostMarket Surveillance Studies**: Under Section 522 of the Federal Food, Drug, and Cosmetic Act, the FDA can require manufacturers to conduct post market surveillance studies to gather additional information about a device's performance.

  上市后监测研究：根据《联邦食品、药品和化妆品法》第 522 条，FDA 可以要求制造商进行上市后监测研究，以收集有关设备性能的更多信息。

- **Post-Approval Studies**: For devices approved through the Premarket Approval (PMA) process, the FDA may require post-approval studies to monitor long-term safety and effectiveness.

  批准后研究：对于通过上市前批准（PMA）流程批准的设备，FDA 可能要求进行批准后研究以监测长期安全性和有效性。

COMPLIANCE INSIGHT, INC

- **Device Tracking**: Certain high-risk devices must be tracked to ensure that they can be located quickly if necessary.

  设备跟踪：必须跟踪某些高风险设备，以确保在必要时能够快速找到它们。

- **Recalls and Safety Alerts**: The FDA monitors and manages recalls and safety alerts to address any issues that arise with marketed devices.

  召回和安全警报：FDA 监控和管理召回和安全警报，以解决市场上的设备出现的任何问题。

- **Cybersecurity Management**: Manufacturers are encouraged to address cybersecurity vulnerabilities throughout the product lifecycle, including post market management.

  网络安全管理：鼓励制造商在整个产品生命周期中解决网络安全漏洞，包括上市后管理。

- **FDA Facility Inspections**: Inspections are part of the FDA's efforts to ensure ongoing compliance with regulatory requirements and to monitor the safety and effectiveness of medical devices once they are on the market. Key aspects of these inspections include:

  FDA 设施检查：检查是 FDA 确保持续遵守监管要求以及监控医疗器械上市后的安全性和有效性的努力的一部分。这些检查的关键方面包括：

  - **Quality System (QS) Inspections:** These inspections assess the manufacturer's quality management system to ensure it complies with the FDA's Quality System Regulation (QSR). This includes evaluating management controls, design controls, production and process controls, and corrective and preventive actions.

    质量体系 (QS) 检查：这些检查评估制造商的质量管理体系，以确保其符合 FDA 的质量体系法规 (QSR)。这包括评估管理控制、设计控制、生产和过程控制以及纠正和预防措施。

- Medical Device Reporting (MDR) Inspections: The FDA inspects manufacturers to ensure they are properly reporting adverse events, malfunctions, and other significant issues related to their devices.

  医疗器械报告（MDR）检查：FDA 检查制造商以确保他们正确报告与其设备相关的不良事件、故障和其他重大问题。

- Post-Approval and Post market Surveillance Inspections: For devices approved through the Premarket Approval (PMA) process, the FDA may conduct inspections to verify that post-approval study requirements are being met. Similarly, post market surveillance studies required under Section 522 of the Federal Food, Drug, and Cosmetic Act may also be subject to FDA inspections.

  批准后和上市后监督检查：对于通过上市前批准（PMA）流程批准的器械，FDA 可能会进行检查以验证是否满足批准后研究要求。同样，《联邦食品、药品和化妆品法》第 522 条要求的上市后监督研究也可能受到 FDA 检查。

COMPLIANCE INSIGHT, INC

Complaints and Medical Device Reporting (MDRs)
投诉和医疗器械报告 (MDR)

- Complaint Files - include any written, electronic, or oral communication that alleges deficiencies related to the identity, quality, durability, reliability, safety, effectiveness, or performance of a device after it is released for distribution. Manufacturers and U.S. Importers must have procedures in place for evaluating complaints.
  投诉文件 - 包括任何书面、电子或口头通信，声称在设备发布销售后，其特性、质量、耐用性、可靠性、安全性、有效性或性能存在缺陷。制造商和美国进口商必须有评估投诉的程序。

- Medical Device Reporting (MDR) – deaths, serious injuries, malfunctions
  医疗器械报告 (MDR) – 死亡、严重伤害、故障
  - Manufacturers 制造商
  - U.S. Importers 美国进口商
  - Device User Facilities 设备用户设施

COMPLIANCE INSIGHT, INC

Complaints and Medical Device Reporting (MDRs)

REPORTER	WHAT TO REPORT	TO WHOM	WHEN
Manufacturers	30-day reports of deaths, serious injuries and malfunctions	FDA	Within 30 calendar days of becoming aware of an event
	5-day reports for an event designated by FDA or an event that requires remedial action to prevent an unreasonable risk of substantial harm to the public health	FDA	Within 5 workdays of becoming aware of an event
Importers	Reports of deaths and serious injuries	FDA and the manufacturer	Within 30 calendar days of becoming aware of an event
	Reports of malfunctions	Manufacturer	Within 30 calendar days of becoming aware of an event

Medical Device Reporting Requirements

COMPLIANCE INSIGHT, INC

投诉和医疗器械报告 (MDR)

记者	报告内容	给谁	什么时候
制造商	30 天内的死亡、重伤和故障报告	FDA	获悉事件发生后 30 个日历日内
	对于 FDA 指定的事件或需要采取补救措施以防止对公众健康造成重大损害的不合理风险的事件，需要 5 天报告	FDA	获悉事件发生后 5 个工作日内
进口商	死亡和重伤报告	FDA 和制造商	获悉事件发生后 30 个日历日内
	故障报告	制造商	获悉事件发生后 30 个日历日内

医疗器械报告要求

COMPLIANCE INSIGHT, INC

Change Management 变更管理

Change Management to a medical device

变更管理 -

- Manage design, manufacturing, or labeling changes

  管理设计、制造或标签变更

- Assess regulatory impact (e.g., need for new 510(k) or EU notification)

  评估监管影响（例如，需要新的 510(k) 或欧盟通知

- Update documentation and implement revised risk assessments

  更新文件并实施修订的风险评估

COMPLIANCE INSIGHT, INC

FDA Inspections　FDA 检查

The FDA inspects facilities to verify compliance with regulatory requirements before and after medical device clearance/ approval.

FDA 在医疗器械清关/批准之前和之后都会对设施进行检查，以验证其是否符合监管要求。

- **Types of Inspections:　检查类型：**
  - Pre-approval inspections (PAI) for PMA and for some Class III 510(k) devices
    PMA 和某些 III 类 510(k) 器械的预批准检查 (PAI)
  - Routine inspections for compliance
    例行检查以确保合规性。
  - For-cause inspections in response to complaints or violations
    针对投诉或违规行为进行的有因检查。
  - Follow up inspections after a 483 or Warning Letter is issued
    收到 483 或警告信后进行跟进检查

COMPLIANCE INSIGHT, INC

What to Expect during the FDA Inspection:

FDA检查期间的预期情况：

- Inspectors will review documentation, observe processes, and interview staff

  检查人员将审查文件、观察流程并采访员工。

- Common areas of focus: CAPA, complaint handling, labeling, and design and production controls

  常见重点领域：CAPA、投诉处理、标签以及设计和生产控制

- Be aware that Inspectors are trained to read body language and upside-down writing

  请注意，检查员受过训练，能够解读肢体语言和倒写文字

COMPLIANCE INSIGHT, INC

FDA Inspections – Preparing Your Facility

FDA 检查 – 准备您的设施

- Always maintain Inspection Readiness

  始终保持检查准备

- Establish an Inspection Team

  成立检查组

- Refer to SOPs to answer questions properly

  使用 SOP 回答问题

- Keep training records up to date

  保持培训记录最新

- Ensure appropriate, knowledgeable person supplies the answers

  确保适当的、知识渊博的人提供答案

- Ensure rapid document retrieval

  快速文档检索

COMPLIANCE INSIGHT, INC

- Train employees on FDA expectations

  对员工进行 FDA 期望方面的培训。
- Obtain Regulatory intelligence on the inspector(s)

  获取检查员的监管情报
- Ensure all records are up to date and accessible

  确保所有记录都是最新的并且可以访问。
- Clean and organize workspaces

  清洁和整理工作空间
- Calibration and maintenance logs current

  校准和维护日志保持最新
- Clear access to areas the FDA may inspect (labs, manufacturing, warehouses, etc.)

  FDA 可能检查的区域（实验室、制造、仓库等）的无障碍通道

COMPLIANCE INSIGHT, INC

- Ensure all records are up to date and accessible

  确保所有记录都是最新的并且可以访问。
- Conduct FDA mock audits to train on responding to FDA

  进行模拟 FDA 审计，以培训如何应对 FDA
  - Set up a room for Quality Manual, SOPs, Design History Files, Complaints, training records, Investigations, Process Validation Reports, etc.

    设立专门的房间，用于存放质量手册、标准操作程序、设计历史文件、投诉、培训记录、调查、工艺验证报告等。
  - Ensure English translations of SOPs and other records are ready for review

    有 SOP 和其他记录的英文翻译

Mock FDA Inspection: To assess facility's compliance with FDA regulations and their readiness for an actual FDA inspection.

模拟 FDA 检查：评估工厂是否遵守 FDA 规定以及是否准备好接受实 际 FDA 检查。

COMPLIANCE INSIGHT, INC

FDA Inspections – Do's and Dont's
FDA 检查 – 注意事项

- Do not volunteer information, but present a complete story
  不要主动提供信息，而是呈现一个完整的故事
- Do not withhold material information
  不要隐瞒重大信息
- Do not volunteer information, but present a complete story
  不要主动提供信息，而是呈现一个完整的故事
- Top management's presence is important
  高层管理人员的存在很重要
- Request a daily summary meeting
  要求召开每日总结会议

COMPLIANCE INSIGHT, INC

FDA Inspections – Do's and Dont's
FDA 检查 – 注意事项

- Debrief daily, plan for the next day
  每日总结，计划第二天
- Refer to SOPs to answer questions
  使用 SOP 回答问题
- Ensure appropriate, knowledgeable person supplies the answers
  确保适当的、知识渊博的人提供答案
- Rapid document retrieval
  快速文档检索

COMPLIANCE INSIGHT, INC

The end of the FDA Inspection
FDA 检查结束

If the FDA Issues an FDA Form 483 (Inspectional Observation form):

如果 FDA 发布 FDA 483 表观察结果：

- Respond in writing within **15 business days**.

  15 个工作日内回复。

- Develop an **Action Plan** with Corrective Actions and Preventive Actions (CAPAs) to address deficiencies.

  制定包含纠正措施和预防措施 (CAPA) 的行动计划来解决缺陷。

- Provide planned and corrective actions with **clear timelines** for implementation.

  提供纠正措施并设定明确的实施时间表。

COMPLIANCE INSIGHT, INC

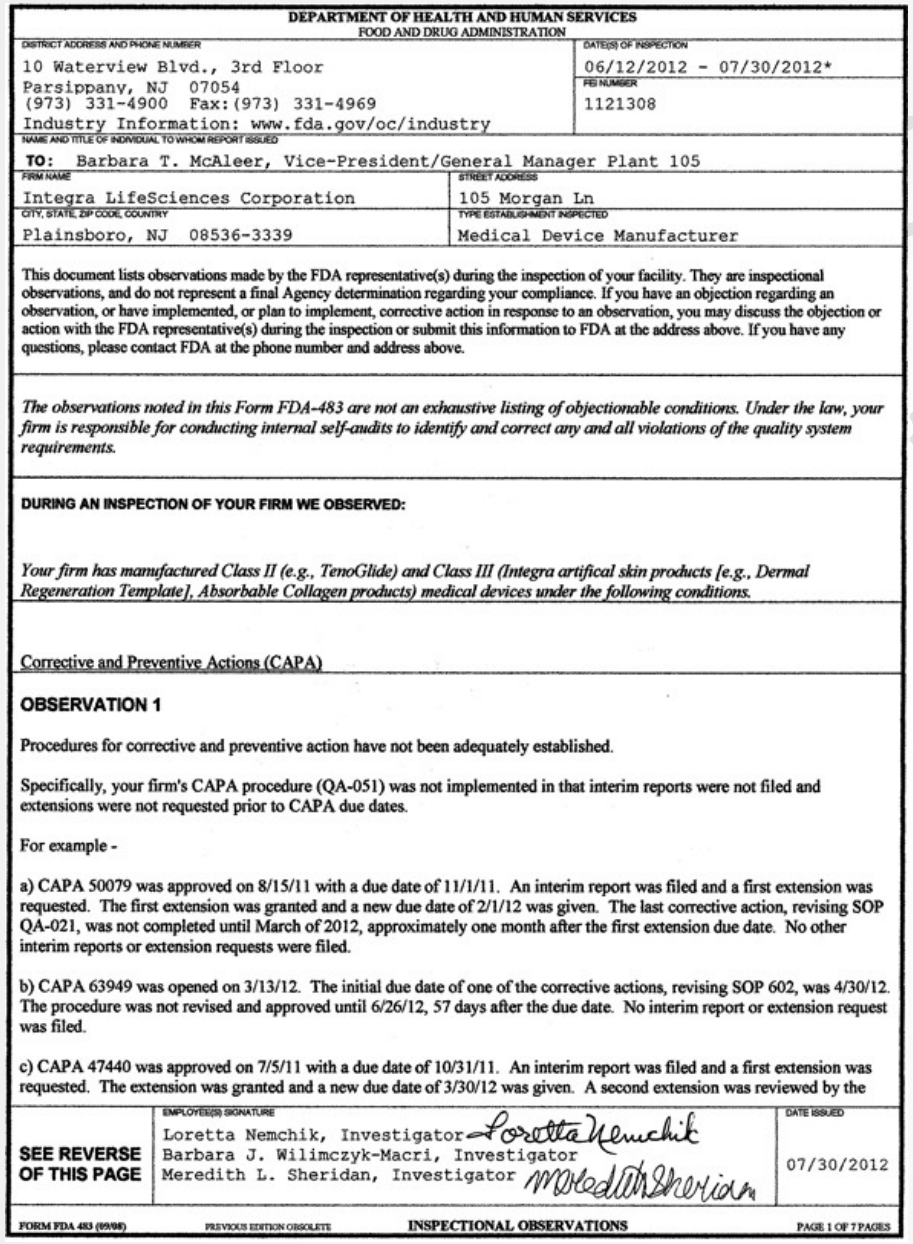
The end of the FDA Inspection
FDA 检查结束

- Update FDA on progress every month in a written update report
  每月向 FDA 通报进展情况

- FDA will not reinspect until substantially complete with commitments
  FDA 在基本完成承诺之前不会重新检查

- FDA will not lift Import Alert until successful reinspection
  FDA 不会解除进口警报，除非重新检查成功

COMPLIANCE INSIGHT, INC



DEPARTMENT OF HEALTH AND HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION

DISTRICT ADDRESS AND PHONE NUMBER
10 Waterview Blvd., 3rd Floor
Parsippany, NJ 07054
(973) 331-4900 Fax:(973) 331-4969
Industry Information: www.fda.gov/oc/industry

DATE(S) OF INSPECTION
06/12/2012 - 07/30/2012*

FEI NUMBER
1121308

NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED
TO: Barbara T. McAleer, Vice-President/General Manager Plant 105

FIRM NAME
Integra LifeSciences Corporation

STREET ADDRESS
105 Morgan Ln

CITY, STATE, ZIP CODE, COUNTRY
Plainsboro, NJ 08536-3339

TYPE ESTABLISHMENT INSPECTED
Medical Device Manufacturer

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.

The observations noted in this Form FDA-483 are not an exhaustive listing of objectionable conditions. Under the law, your firm is responsible for conducting internal self-audits to identify and correct any and all violations of the quality system requirements.

DURING AN INSPECTION OF YOUR FIRM WE OBSERVED:

Your firm has manufactured Class II (e.g., TenoGlide) and Class III (Integra artifical skin products [e.g., Dermal Regeneration Template], Absorbable Collagen products) medical devices under the following conditions.

Corrective and Preventive Actions (CAPA)

OBSERVATION 1

Procedures for corrective and preventive action have not been adequately established.

Specifically, your firm's CAPA procedure (QA-051) was not implemented in that interim reports were not filed and extensions were not requested prior to CAPA due dates.

For example -

a) CAPA 50079 was approved on 8/15/11 with a due date of 11/1/11. An interim report was filed and a first extension was requested. The first extension was granted and a new due date of 2/1/12 was given. The last corrective action, revising SOP QA-021, was not completed until March of 2012, approximately one month after the first extension due date. No other interim reports or extension requests were filed.

b) CAPA 63949 was opened on 3/13/12. The initial due date of one of the corrective actions, revising SOP 602, was 4/30/12. The procedure was not revised and approved until 6/26/12, 57 days after the due date. No interim report or extension request was filed.

c) CAPA 47440 was approved on 7/5/11 with a due date of 10/31/11. An interim report was filed and a first extension was requested. The extension was granted and a new due date of 3/30/12 was given. A second extension was reviewed by the

SEE REVERSE OF THIS PAGE

EMPLOYEE(S) SIGNATURE
Loretta Nemchik, Investigator
Barbara J. Wilimczyk-Macri, Investigator
Meredith L. Sheridan, Investigator

DATE ISSUED
07/30/2012

FORM FDA 483 (09/08) PREVIOUS EDITION OBSOLETE INSPECTIONAL OBSERVATIONS PAGE 1 OF 7 PAGES

Example FDA Form 483
FDA 483 表格示例

COMPLIANCE INSIGHT, INC

Additional Enforcement Actions by FDA
FDA 的其他执法行动

Untitled Letter
无标题的信

Regulatory Meeting
监管会议

Seizures, injunctions, and fines
扣押、禁令和罚款

Import Alert/Red List (Case Study)
进口警报/红色名单（案例研究）

Recall or removal
召回或删除

Warning Letter
警告信

COMPLIANCE INSIGHT, INC

FDA Warning Letter
警告信

WARNING LETTER
CMS# 700835

March 4, 2025

Dear Mr. Sayer:

During inspections of your firms located in San Diego, CA on October 21, 2024, through November 7, 2024, and Mesa, AZ on June 10, 2024, through June 14, 2024, investigators from the United States Food and Drug Administration (FDA) determined that your firm manufactures the G6 and G7 continuous glucose monitors. Under section 201(h) of the Federal Food, Drug, and Cosmetic Act (the Act), 21 U.S.C. § 321(h), these products are devices because they are intended for use in the diagnosis of disease or other conditions or in the cure, mitigation, treatment, or prevention of disease, or to affect the structure or any function of the body.

These inspections revealed that these devices are adulterated within the meaning of section 501(h) of the Act, 21 U.S.C. § 351(h), in that the methods used in, or the facilities or controls used for, their manufacture, packing, storage, or installation are not in conformity with the current good manufacturing practice requirements of the Quality System regulation found at Title 21, Code of Federal Regulations (CFR), Part 820. We received responses from Charles R. Donlon, Senior Vice President, Quality Assurance on July 9, 2024; October 9, 2024; December 3, 2024; January 7, 2025; and January 10, 2025, concerning our investigators' observations noted on the Form FDA 483 (FDA 483), List of Inspectional Observations, that were issued to your firm on June 14, 2024, and November 7, 2024. We address these responses below, in relation to each of the noted violations. These violations include, but are not limited to, the following:

警告信

CMS# 700835

2025 年 3 月 4 日

亲爱的塞耶先生：

于 2024 年 10 月 21 日至 2024 年 11 月 7 日对位于加利福尼亚州圣地亚哥的公司进行检查，并于 2024 年 6 月 10 日至 2024 年 6 月 14 日对位于亚利桑那州梅萨的公司进行检查，发现贵公司生产 G6 和 G7 连续血糖监测仪。根据《联邦食品、药品和化妆品法案》（该法案）第 201(h) 节，即 21 USC § 321(h)，这些产品属于医疗器械，因为它们旨在用于诊断疾病或其他病症，或用于治愈、缓解、治疗或预防疾病，或用于影响身体的结构或任何功能。

这些检查显示，这些器械根据该法案第 501(h) 节（21 USC § 351(h)）的规定属于掺假产品，因为其制造、包装、储存或安装所使用的方法或设施或控制不符合《联邦法规》（CFR）第 21 篇第 820 部分的质量体系法规中现行良好生产规范的要求。我们于 2024 年 7 月 9 日、2024 年 10 月 9 日、2024 年 12 月 3 日、2025 年 1 月 7 日收到了质量保证高级副总裁 Charles R. Donlon的回复；以及 2025 年 1 月 10 日，针对我们调查人员在 2024 年 6 月 14 日和 2024 年 11 月 7 日向贵公司发出的 FDA 483 表格（FDA 483）《检查观察清单》中指出的观察结果。我们针对每项指出的违规行为，在下文中做出回应。这些违规行为包括但不限于以下内容：

Of the 123 Warning Letters issued from 2020 – 2025 by U.S. FDA, 24 Medical Device Warning Letters were related to production in China:

在美国FDA于2020年至2025年发布的123封警告信中，有24封医疗器械警告信与中国生产有关：

- 11 Warning Letters sent to establishments in China

  向中国境内机构发出 11 封警告信

- 12 Warning Letters sent to establishments in the U.S. related to products manufactured in China and sold in the U.S.

  向美国企业发出 12 封警告信，涉及在中国生产并在美国销售的产品

- 1 Warning Letter sent to an establishment in the Netherlands related to products manufactured in China and sold in the U.S.

  向荷兰一家机构发送了 1 封警告信，涉及在中国生产并在美国销售的产品

COMPLIANCE INSIGHT, INC

US FDA's Top Medical Device inspection findings from 2024

Reference Number	Short Description	Long Description	Frequency
21 CFR 820.100(a)	Lack of or inadequate procedures	Procedures for corrective and preventive action have not been [adequately] established. Specifically, ***	254
21 CFR 820.198(a)	Lack of or inadequate complaint procedures	Procedures for receiving, reviewing, and evaluating complaints by a formally designated unit have not been [adequately] established. Specifically,***	191
21 CFR 820.90(a)	Nonconforming product, Lack of or inadequate procedures	Procedures have not been [adequately] established to control product that does not conform to specified requirements. Specifically, ***	92
21 CFR 820.75(a)	Lack of or inadequate process validation	A process whose results cannot be fully verified by subsequent inspection and test has not been [adequately] validated according to established procedures. Specifically, ***	85
21 CFR 820.50	Purchasing controls, Lack of or inadequate procedures	Procedures to ensure that all purchased or otherwise received product and services conform to specified requirements have not been [adequately] established. Specifically, ***	82
21 CFR 820.100(b)	Documentation	Corrective and preventive action activities and/or results have not been [adequately] documented. Specifically, ***	59
21 CFR 803.17	Lack of Written MDR Procedures	Written MDR procedures have not been [developed] [maintained] [implemented]. Specifically, ***	54
21 CFR 820.22	Quality audits - Lack of or inadequate procedures	Procedures for quality audits have not been [adequately] established. Specifically, ***	50

Top 7 Warning Letter citations for Medical Devices from China issued by U.S. FDA for 2020-2025:

2020-2025 年美国 FDA 针对中国医疗器械发布的 7 大警告信引文：

1. **Labeling**-In addition, the Disposable Medical Face Mask is misbranded under section 502(a) of the Act, 21 U.S.C. § 352(a), because its labeling is false or misleading. FDA registration of a device establishment or assignment of a registration number does not denote FDA approval of the establishment or the device. Thus, references to a firm's establishment registration and registration number that create an impression of official FDA approval, clearance, authorization, certification, endorsement or other evaluation of the establishment or the device are misleading and constitute misbranding. See 21 CFR 807.39.

   标签- 此外，根据该法案第 502(a) 节（21 USC § 352(a)），一次性医用口罩属于贴错标签，因为其标签是虚假或误导性的。FDA 对设备机构的注册或注册号的分配并不表示 FDA 批准该机构或设备。因此，提及公司的机构注册和注册号会给人留下 FDA 官方批准、放行、授权、认证、认可或其他评估的印象，这是误导性的，构成贴错标签。请参阅 21 CFR 807.39。

2. Design Controls - Failure to establish and maintain adequate procedures to control the design of the device in order to ensure that specified design requirements are met, as required by 21 CFR 820.30(a).

设计控制- 未能建立和维持足够的程序来控制设备的设计，以确保满足指定的设计要求，如 21 CFR 820.30(a) 所要求的那样。

For example, your firm has not established Design Control procedures related to its private label manufactured medical devices intended for the U.S. market to include Class II Sterile and Non-Sterile Electrosurgical Scissors, Class II Sterile Electrosurgical Graspers, and Class II Sterile Veress Pneumoperitoneum Needles. Additionally, your firm was unable to provide documentation and/or evidence of conducting Design and Development activities for these medical devices.

例如，贵公司尚未建立与其自有品牌生产的、面向美国市场的医疗器械相关的设计控制程序，包括 II 类无菌和非无菌电外科剪刀、II 类 无菌电外科抓钳和 II 类无菌 Veress 气腹针。此外，贵公司无法提供针对这些医疗器械进行设计和开发活动的文件和/或证据。

3. Medical Device Reporting - Failure to submit a report to the FDA no later than 30 calendar days after the day that your firm received or otherwise became aware of information, from any source, that reasonably suggests that a device that it markets has malfunctioned and this device or a similar device that your firm markets would be likely to cause or contribute to a death or serious injury, if the malfunction were to recur, as required by 21 CFR 803.50(a)(2)…… However, your firm failed to submit MDRs for each of the referenced complaints.

医疗器械报告 - 未能在贵公司从任何来源收到或以其他方式获知信息之日起 30 个日历日内向 FDA 提交报告，该信息合理表明其销售的某种器械出现故障，并且该器械或贵公司销售的类似器械如果故障再次发生，可能会导致或促成死亡或严重伤害，如 21 CFR 803.50(a)(2) 所要求的……但是，贵公司未能针对每一项提及的投诉提交 MDR。

COMPLIANCE INSIGHT, INC

4. Validation- Failure to adequately establish and maintain procedures for monitoring and control of process parameters for validated processes to ensure that the specified requirements continue to be met, as required by 21 CFR 820.75(b).

For example: Your firm was unable to provide validation documentation with objective evidence and data for activities related to the manufacturing of medical devices, specifically EtO Sterilization, Heat Sealing Packaging, and UV Glue Curing documented in the Validation Management Control Procedure (Doc No. **(b)(4)**, Ver. No. **(b)(4)** and dated **(b)(4)**), Sealing Machine Sealing Effect Re-Verification Program (Doc No. **(b)(4)**, Ver. **(b)(4)** and dated **(b)(4)**), Sealing Machine Sealing Effect Re-Verification Report (Doc No. **(b)(4)**, Ver. **(b)(4)** and dated **(b)(4)**), UV Curing Re-Verification Program (Doc No. **(b)(4)**, Ver. **(b)(4)** and dated **(b)(4)**). Your firm also did not have personnel familiar with process validation.

验证 - 未能充分建立和维护已验证工艺的工艺参数监控和控制程序，以确保继续满足规定的要求，如 21 CFR 820.75(b) 所要求的。 例如：你的公司无法提供与医疗器械生产相关活动的验证文件，其中包含客观证据和数据，特别是验证管理控制程序 (文件编号 (b)(4)，版本 (b)(4) 和日期 (b)(4)) 中记录的 EtO 灭菌、热封包装和紫外线胶固化、封口机密封效果重新验证程序 (文件编号 (b)(4)，版本 (b)(4) 和日期 (b)(4))、封口机密封效果重新验证报告 (文件编号 (b)(4)，版本 (b)(4) 和日期 (b)(4))、紫外线固化重新验证程序 (文件编号 (b)(4)，版本 (b)(4) 和日期 (b)(4))。你的公司也没有熟悉工艺验证的人员。

5. Customer Complaints - Failure to establish and maintain procedures for receiving, reviewing, and evaluating complaints by a formally designated unit, as required by 21 CFR 820.198(a).

For example: Your firm's Control Procedures for Customer Feedback, Complaints and Return, **(b)(4)** and dated **(b)(4)**, has no requirement to ensure your firm is receiving complaints from its distributor that is marketing and selling the private label manufactured medical devices in the U.S. market. Additionally, your firm has no documented agreement with its U.S. private label distributor requiring them to provide your firm with complaints. It is important that your firm reviews and evaluates all complaints in a uniform and timely manner to determine whether an investigation is necessary and that they are evaluated to determine whether the complaint represents an event that is reportable under 21 CFR Part 806, Medical Device Reporting.

客户投诉 - 未能按照 21 CFR 820.198(a) 的要求，由正式指定单位建立和维护接收、审查和评估投诉的程序。 例如：贵公司的客户反馈、投诉和退货控制程序 (b)(4) 和日期为 (b)(4) 没有要求确保贵公司收到来自在美国市场营销和销售自有品牌制造的医疗器械的经销商的投诉。此外，贵公司没有与其美国自有品牌经销商达成书面协议，要求他们向贵公司提供投诉。贵公司必须以统一及时的方式审查和评估所有投诉，以确定是否需要进行调查，并对其进行评估以确定投诉是否代表根据 21 CFR 第 806 部分《医疗器械报告》可报告的事件。

6. Device Master Record (DMR)/ Device History Record (DHR) - Failure to adequately establish and maintain procedures to ensure that DHR's for each batch, lot, or unit are maintained to demonstrate that the device is manufactured in accordance with the DMR, and the requirements of this part as required by 21 CFR 820.184.

For example: Your firm was not able to provide Device History Records for their manufactured medical devices intended and exported to the U.S. market. Your firm was unfamiliar with FDA regulations and requirements for manufactures to include the DHR requirements and their Device History Record Control Procedures (Doc No. **(b)(4)**, Ver. **(b)(4)** and dated **(b)(4)**).

设备主记录 (DMR)/设备历史记录 (DHR) - 未能充分建立和维护程序，以确保维护每个批次、批号或单位的 DHR，以证明设备是根据 DMR 制造的，并符合 21 CFR 820.184 规定的本部分的要求。 例如：贵公司无法为其制造的、打算出口到美国市场的医疗设备提供设备历史记录。贵公司不熟悉 FDA 法规和制造商要求，包括 DHR 要求及其设备历史记录控制程序（文件编号 (b)(4)、版本 (b)(4) 和日期为 (b)(4)）。

COMPLIANCE INSIGHT, INC

Failure to maintain device master records (DMRs) as required by 21 CFR 820.181.
For example: Your firm has not maintained their Device Master Records related to the subject device, and the personnel was unfamiliar with documents, processes, and medical devices related to the U.S. market. Additionally, the manager of the site was not familiar with the FDA regulatory requirements to include DMRs for medical device manufacturers.

未能按照 21 CFR 820.181 的要求维护设备主记录 (DMR)。 例如：贵公司尚未维护与该设备相关的设备主记录，且人员不熟悉与美国市场相关的文件、流程和医疗器械。此外，该工厂的经理不熟悉 FDA 监管要求，即包括医疗器械制造商的 DMR。

COMPLIANCE INSIGHT, INC

7. Evaluate Product in the Market - …. However, you have no plan to evaluate and retrospectively conduct design control activities for affected products. You should conduct a review of your products to determine which products did not have design control activities conducted and retrospectively conduct those activities to ensure products meet design requirements. In addition, you should actively assess if lack of design control activities could have led to the distribution of nonconforming products (aside from review of adverse event or malfunction reports). If any risks are identified, you should take appropriate action to mitigate those risks.

评估市场上的产品 - …. 但是，您没有计划对受影响的产品进行评估和追溯设计控制活动。您应该对产品进行审查，以确定哪些产品没有进行设计控制活动，并追溯这些活动以确保产品符合设计要求。此外，您应该积极评估缺乏设计控制活动是否会导致不合格产品的分销（除了审查不良事件或故障报告）。如果发现任何风险，您应该采取适当的措施来减轻这些风险。

COMPLIANCE INSIGHT, INC

Other commonly cited issues include:
其他常见问题包括：

- Lack of Quality Management System (QMS) or Quality Procedures
  缺乏质量管理体系 (QMS) 或质量程序
- Lack of Maintenance Procedures
  维护程序
- Not reporting a Field Correction or Recall
  未报告现场更正或召回
- Documents not presented to U.S. FDA in English
  未向美国 FDA 提交英文文件

COMPLIANCE INSIGHT, INC

- Not addressing Product in the Market

  未涉及市场上的产品

- Products sold do not match 510(k) approved

  所售产品不符合 510(k) 批准

- Investigation and CAPA

  调查和 CAPA

COMPLIANCE INSIGHT, INC

Field Correction and Recall 现场校正和召回

Warning Letters can result in Field Correction or Recall.

警告信可能导致现场更正或召回。

Field Correction: A correction made at the site of the device rather than removing it from the field.

现场纠正：在设备现场进行的纠正，而不是将其从现场移除。

Recall: An action taken to address a product that violates FDA laws. This includes the removal, correction, or notification about a device that presents a risk to health.

召回：针对违反 FDA 法律的产品采取的行动。这包括移除、纠正或通知对健康构成风险的设备。

COMPLIANCE INSIGHT, INC

Recall Classification: 召回分类：

- **Class I**: Reasonable probability of serious adverse health consequences or death.

  I 类：有合理可能性导致严重不良健康后果或死亡。

- **Class II**: Temporary or medically reversible adverse health consequences.

  II 类：暂时或医学上可逆转的不良健康后果。

- **Class III**: Not likely to cause adverse health consequences.

  III 类：不太可能导致不良健康后果。

COMPLIANCE INSIGHT, INC

Recall Strategy (per 21 CFR 7.42)

召回策略（根据 21 CFR 7.42）

Should include:

应包括：

- **Depth of recall** (user level, distributor, etc.)
- **召回深度**（用户级别、分销商等）
- **Public warning** if appropriate
- **如有必要，**公开警告
- **Effectiveness checks**
- **有效性检查**

COMPLIANCE INSIGHT, INC

- **Recall communications** (letters, notices)

召回沟通（信函、通知）

- FDA evaluates the recall and assigns the classification

  FDA 评估召回并指定分类

- Monthly reports are to be submitted until the recall terminates

  每月提交报告，直至召回终止 - 制造商可在证明有效性后请求终止

- The manufacturer may request termination after demonstrating effectiveness

  制造商可在证明有效性后请求终止

- FDA issues a formal recall termination letter if in agreement

  如果同意，FDA 将发出正式的召回终止函

Lifecycle Management for Medical Devices 医疗器械的生命周期管理

What is Lifecycle Management (LCM)? 什么是生命周期管理 (LCM)

- **LCM** refers to the systematic oversight of a medical device from concept to retirement, ensuring continued safety, effectiveness, and regulatory compliance.

LCM 是指对医疗设备从概念到退役进行系统性监督，确保持续的安全性、有效性和法规遵从性。

- Guide the company through information, decisions, results and assumptions related to the supply chain, production, testing, and retirement activities documented in an intelligence repository.

通过情报库中记录的与供应链、生产、测试和退役活动相关的信息、决策、结果和假设来指导公司。

- Provides support for future decisions regarding the supplier and/or device made by any functional area.

为任何职能领域就供应商和/或设备做出的未来决策提供支持。

COMPLIANCE INSIGHT, INC

End-of-Lifecycle (EOL) Management
生命周期终止管理 (EOL)

- Planned device discontinuation:

计划停产的设备：

  - Notify customers and regulators
    通知客户和监管机构
  - Service and support planning –
    服务和支持规划
  - Document retention and archival
    文件保留和归档
  - Risk management for discontinued products
    停产产品的风险管理

COMPLIANCE INSIGHT, INC

About Compliance Insight
关于合规洞察

Your Trusted Partner in US Market Entry 您在美国市场准入方面的可信赖合作伙伴

Who We Are　关于我们

- US-based FDA compliance experts with 25 years of experience
  总部位于美国的FDA合规专家，拥有25年经验
- Specialists in guiding international medical device manufacturers to US market success
  专门指导国际医疗器械制造商成功进入美国市场

COMPLIANCE INSIGHT, INC

Our Direct FDA Expertise 我们的FDA直接专业能力

- **FDA Liaison Services** - Primary interface for all FDA communications
  FDA联络服务 - 所有FDA沟通的主要接口
- **Meeting Management** - Draft requests, prepare packages, represent you
  会议管理 - 起草申请、准备文件包、代表您参会
- **Regulatory Submissions** - 510(k), PMA, IDE applications and review management
  监管申报 - 510(k)、PMA、IDE申请及审查管理
- **Compliance Remediation** - FDA 483 and Warning Letter Responses
  合规修复 - FDA 483观察和警告信回复
- **Industry Leadership** - Active in FDA policy development and guidance creation
  行业领导力 - 积极参与FDA政策制定和指导创建

COMPLIANCE INSIGHT, INC

Comprehensive Support Services 全面支持服务

- QMS implementation & optimization
  QMS实施与优化
- FDA readiness inspections & audit preparation
  FDA准备就绪检查和审计准备
- Staff training programs
  员工培训计划
- Supplier audits & risk assessment
  供应商审计与风险评估
- Complete documentation development
  完整文档开发

COMPLIANCE INSIGHT, INC

Please scan this QR code to access:

- Our direct contact information
- Detailed case studies of successful US market entries
- Comprehensive FDA readiness checklist
- Complete 510(k) submission checklist
- Today's full presentation materials

请扫描此二维码以获取以下内容：

- 我们的直接联系方式
- 成功进入美国市场的详细案例研究
- 全面的 FDA 合规准备清单
- 完整的 510(k) 申报清单
- 今天的完整演示资料

COMPLIANCE INSIGHT, INC

Thank you to the Jiangsu Provincial Drug Administration for organizing this event

Thank you for your attention!

For inquiries, please contact our authorized partners in China!

感谢江苏省药品监督管理局组织本次活动

感谢您的关注！

如有咨询，请联系我们在中国的授权合作伙伴！

Thank you to the Jiangsu Provincial Drug Administration for organizing this event

Thank you for your attention!

For inquiries, please contact our authorized partners in China!

感谢江苏省药品监督管理局组织本次活动

感谢您的关注！

如有咨询，请联系我们在中国的授权合作伙伴！