

[USPTO and FDA Continue to Focus on Patent Quality in the Pharmaceutical Industry](#)



After a recent reminder from the U.S. Patent and Trademark Office (USPTO) regarding the duties of disclosure and reasonable inquiry during examination of a patent application and a Request for Comments (RFC) on the USPTO initiatives to ensure “robustness and reliability” of patent rights,[1] the Director of the U.S. Patent and Trademark Office published a third notice in less than four months. The latest notice is in conjunction with the Food and Drug Administration (FDA) to further the discussion surrounding the patent practices of the pharmaceutical industry ([87 Fed. Reg. 67019](#) (November 7, 2022)). Specifically, the notice is of a public listening session and request for comments (PLS/RFC).

Against the backdrop of President Biden’s Competition Executive Order (EO) that calls for action “to help ensure that the patent system, while incentivizing innovation, does not unjustifiably delay generic drug or biosimilar competition beyond that reasonably contemplated by applicable law,” as well as Congressional and public interest in this goal, the stated purpose of the present notice of the PLS/RFC is to obtain public input for areas of joint USPTO-FDA collaboration and engagement with respect to the pharmaceutical industry to promote greater access to medicines for American families.

In particular, the USPTO and FDA are seeking feedback from a broad group of stakeholders, most notably, patients and their caregivers, patient advocates, representatives from regulated industry, including companies that sell branded medicines, generic drugs and biosimilars, healthcare organizations, payers and insurers, academic institutions, public interest groups, and the general public.

The background of the notice of the PLS/RFC describes the response to the EO and details certain communications between the USPTO and the FDA in furtherance of its objectives. More specifically, in a letter from the USPTO to the FDA, initiatives for collaboration were outlined including exploring joint USPTO-FDA public engagements, providing examiners with training on publicly available FDA resources, exploring consistency in representations made to the USPTO and the FDA, revisiting patent term extension (PTE) practice, exploring the policies surrounding the use of “skinny labels,” and being open to discussing “patent thickets,” “evergreening,” and “product hopping.”

Further, in the current notice, the USPTO states in a footnote that this collaborative PLS/RFC is in parallel with the USPTO’s initial RFC. The initial RFC included new USPTO initiatives to advance the EO; such initiatives include seeking input on enhancing processes for information disclosure statements and the identification of key prior art, considering applying greater scrutiny to continuation patent applications and use of declaratory evidence during patent prosecution, revisiting terminal disclaimer practice and procedures for third party input during prosecution, and conducting a comparative analysis of the prosecution and grant of “pharmaceutical and biological patents” in the United States versus other countries.

Although the USPTO notice on disclosure requirements and the initial RFC include all technologies, it is clear that the focus of the USPTO/FDA's inquiries are related to the pharmaceutical and biologics industries.

More specifically, with respect to the PLS/RFC, its inquiries include considering what FDA resources may be available to USPTO examiners to assess patentability, e.g., determining whether inconsistent statements were made to the USPTO and the FDA, using AIA proceedings to address the patentability of claims in pharmaceutical and biotechnological patents, revisiting PTE practices, understanding "skinny label" practice, and generally promoting greater availability of generic products. The PLS/RFC also seeks input on the questions posed in the USPTO letter to the FDA mentioned above.

The in-person PLS at the USPTO is scheduled for January 19, 2023, from 10 am to 5 pm (ET), for which preregistration is needed to speak. Written comments to the PLS/RFC will be accepted until February 6, 2023, with the comments to the initial RFC of the USPTO extended until February 1, 2023.

Stakeholders are encouraged to participate and we will monitor how the USPTO and the FDA respond to these hotly debated topics that impact almost every American.

[1] See [87 FR 45764](#) (July 29, 2022) and [87 FR 60130](#) (October 4, 2022), respectively. See also [USPTO Publishes Notice Calling Out Pharmaceutical Industry](#), Goodwin Life Sciences Perspective blog, July 29, 2022; and [USPTO Doubles Down Calling Out Pharmaceutical Industry](#), Goodwin Life Sciences Perspective blog, October 19, 2022, respectively.

[Avoiding Misbranding: Words Matter When Describing the Regulatory Status of 510\(k\) Cleared Devices and Registered Device Establishments](#)



When it comes to discussing medical devices regulated by the U.S. Food and Drug Administration (FDA), words such as "approved" and "cleared" cannot be used interchangeably as these terms carry a particular meaning. Similarly, creating an impression of approval of a device establishment or its devices because the establishment is registered with FDA

also is prohibited. Long-standing regulatory provisions, [21 C.F.R. § 807.97](#) and [21 C.F.R. § 807.39](#), set forth, respectively, the FDA's position that approval and clearance are not interchangeable and that device establishment registration does not denote approval of the establishment or its devices. Importantly, these provisions also highlight the consequences to industry for misusing terms when discussing the regulatory status of a device or a device establishment.

When seeking to market a new device for which a premarket notification must be submitted to the FDA demonstrating that the device to be marketed is substantially equivalent to a legally marketed device, the submitter must obtain an order of substantial equivalence from the FDA, which is commonly referred to as a 510(k) *clearance*. Conversely, to market a new device for which a premarket approval application must be submitted to the FDA, the applicant must obtain FDA's *approval* of the application. While FDA review and FDA action occur for both types of medical devices, the outcomes of clearance and approval are distinctly different and carry legal consequences. Specifically, 21 C.F.R. § 807.97 states that “[a]ny representation that creates an impression of official approval of a device because of complying with the premarket notification regulations is misleading and constitutes misbranding.” Additionally, 21 C.F.R. § 807.39 states that “[a]ny representation that creates an impression of official approval because of registration or possession of a registration number is misleading and constitutes misbranding.”

We researched Warning Letters in [FDA's Warning Letter Database](#) and found that FDA issued four Warning Letters citing violations of § 807.97 since 2017 and thirteen Warning Letters citing violations of § 807.39 since 2017.

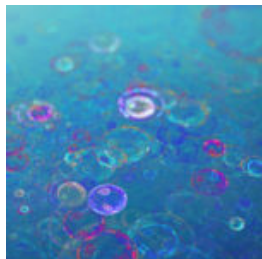
Many of the representations that FDA found to be misleading under § 807.97 were straightforward violations, such as language on product websites stating that cleared devices are “FDA approved,” or listings of device clearances under the heading “FDA Approvals.” In one instance, FDA found the website to be misleading under both § 807.39 and § 807.97 because the company claimed the device had been cleared by the FDA, when in fact it was marketing a 510(k) exempt device for an indication that would require a de novo authorization which the company had not obtained, and the website claimed the company maintained an active listing, which was hyperlinked to the company's FDA Establishment Registration and Device Listing for only the 510(k) exempt device.

In response to the COVID-19 public health emergency, FDA issued twelve Warning Letters related to representations regarding masks and antibody tests that were found to be misleading under § 807.39. In virtually all of these instances, company websites displayed unofficial “certificates of FDA registration” issued by third parties which claimed to certify that the manufacturer had completed FDA Establishment Registration and Device Listing. These certificates often incorporated unauthorized reproductions of FDA's logo and motifs of the U.S. flag, giving the impression of official government documents. FDA consistently found the display of these certificates to be misleading, even when they included ostensible “disclaimer” language stating that the certificates did not denote FDA endorsement or approval. FDA repeatedly found that these disclaimers did not adequately limit or otherwise mitigate the misleading impression of the certificates because they were phrased, designed, and placed in a manner where they could be easily overlooked.

These Warning Letters present a cautionary tale to all sponsors intending to market new medical devices. While sponsors may be tempted to claim their devices are approved by the FDA following the agency's review of a premarket notification or upon completion of FDA Establishment Registration and Device Listing, § 807.97 and § 807.39 make clear that such claims will constitute misbranding. Sponsors can avoid § 807.97- and § 807.39-related Warning Letters and associated liability by carefully reviewing all of the language on their marketing materials and websites to ensure that none of their representations create the impression of official approval based on

reference to a premarket notification submission or establishment registration.

FDA Announces Total Product Life Cycle Advisory Program (TAP) Pilot



The U.S. Food and Drug Administration's ("FDA" or "the Agency") Center for Devices and Radiological Health ("CDRH") recently announced the launch of its Total Product Life Cycle Advisory Program ("TAP") Pilot. The first phase of this voluntary initiative, called TAP Pilot Soft Launch, will be conducted during fiscal year ("FY") 2023 with enrollment beginning on January 1, 2023.

The Agency committed to establishing the TAP Pilot as part of the MDUFA V reauthorization, and the Agency's long-term vision for TAP is "to help spur more rapid development and more rapid and widespread patient access to safe, effective, high-quality medical devices of public health importance." As part of the TAP Pilot, the FDA will provide strategic engagement for such devices by:

- Improving participants' experiences with the FDA by providing for more timely premarket interactions
- Enhancing the experience of all participants throughout the device development and review process, including FDA staff
- Facilitating improved strategic decision-making during device development, including earlier identification, assessment, and mitigation of device development risk
- Facilitating regular and solutions-focused engagement early in device development between FDA review teams, participants, and other stakeholders, such as patients, providers, and payers
- Collaborating to better align expectations regarding evidence generation, improve submission quality, and improve the efficiency of the premarket review process

Read client alert [here](#).

FDA Issues Final Clinical Decision Support Software Guidance



On September 28, 2022, the U.S. Food and Drug Administration (“FDA” or “the Agency”) issued its long-awaited final guidance, “Clinical Decision Support Software” (the “CDS Guidance”). The CDS Guidance follows the Agency’s September 2019 draft guidance of the same name (the “Draft Guidance”) and seeks to clarify several key concepts for determining whether clinical decision support (“CDS”) software is a medical device.

Specifically, the CDS Guidance provides the Agency’s interpretation of the four criteria established by the 21st Century Cures Act for determining whether a decision support software function is excluded from the definition of a device (i.e., is considered “Non-Device CDS”). A software function must meet all of the following four criteria to be considered Non-Device CDS:

1. Not intended to acquire, process, or analyze a medical image or a signal from an in vitro diagnostic device (“IVD”) or a pattern or signal from a signal acquisition system
2. Intended for the purpose of displaying, analyzing, or printing medical information about a patient or other medical information (such as peer-reviewed clinical studies and clinical practice guidelines);
3. Intended for the purpose of supporting or providing recommendations to a health care professional (“HCP”) about prevention, diagnosis, or treatment of a disease or condition
4. Intended for the purpose of enabling such HCP to independently review the basis for the recommendations that such software presents so that it is not the intent that the HCP rely primarily on any of such recommendations to make a clinical diagnosis or treatment decision regarding an individual patient

Software functions that *do not* meet all four criteria are considered device functions subject to FDA oversight. Notable updates to FDA’s interpretation of the four criteria include the following.

Read the Goodwin insight [here](#).

[USPTO Doubles Down Calling Out Pharmaceutical Industry](#)



The new Director of the U.S. Patent and Trademark Office (USPTO), Katherine Vidal, published a stern reminder regarding the duties of disclosure and reasonable inquiry during

examination of a patent application, including reexamination, reissue, and proceedings before the Patent Trial and Appeal Board (PTAB) (87 FR 45764 (July 29, 2022)). The justification was to provide examiners and judges with all the material information needed to decide on patentability of a claimed invention. According to the USPTO, more robust and reliable patents should result, which is better for the public. [See USPTO Publishes Notice Calling Out Pharmaceutical Industry](#), Goodwin Life Sciences Perspective blog, August 1, 2022.

The USPTO now published a Request for Comments (RFC) (87 FR 60130 (October 4, 2022)) on USPTO initiatives to ensure “robustness and reliability” of patent rights, the new buzz words for increased patent quality. Again, the pharmaceutical industry appears to be the main target of the new initiatives. In the background section is President Biden’s Competition Executive Order (EO) that calls for action “to help ensure that the patent system, while incentivizing innovation, does not unjustifiably delay generic drug or biosimilar competition beyond that reasonably contemplated by applicable law.” The RFC also references the Food and Drug Administration and USPTO interactions and communications to help promote the EO.

In particular, the new initiatives for “robust and reliable” patents are primarily directed to preventing what’s been termed, “patent thickets,” which has been defined by Senators Leahy, Blumenthal, Klobuchar, Cornyn, Collins and Braun as a “large number of patents that cover a single product or minor variations on a single product.” According to the Senators, patent thickets impede the generic drug industry to the detriment of the U.S. public.

Included in the new USPTO initiatives to execute the EO are more time and resources to examine patent applications, enhanced processes for information disclosure statements and the identification of key prior art, consideration of applying greater scrutiny to continuation patent applications and use of declaratory evidence during patent prosecution, revisiting terminal disclaimer practice and procedures for third party input during prosecution, and a comparative analysis of the prosecution and grant of “pharmaceutical and biological patents” in the United States versus other countries.

The stated primary purpose of this RFC is to solicit comments from the public on these initiatives, the latter of which is specific to the pharmaceutical industry. Of note, though, the specific topics and initiatives currently being addressed in the RFC are prior art searching, e.g., databases of non-patent literature, support for patent claims in continuation patent applications including priority dates, request for continued examination (RCE) practice, and restriction, divisional, and terminal disclaimer practices.

The RFC includes a list of eleven questions. The first five, some with many subparts, address the USPTO topics and initiatives discussed immediately above. The final six questions are directly from a letter from the Senators to the USPTO. These latter questions are quite enlightening as to what’s in the minds of the Senators and their possible solutions to their perceived problems with the U.S. patent system.

More specifically, the Senators question terminal disclaimer practice, suggesting eliminating it to prohibit patents that are obvious variants. Another question suggests that patents terminally disclaimed over each other should stand or fall together with respect to their validity because they are all obvious variants of each other. Other questions lean towards higher scrutiny and examination of continuation patent applications including limiting the time frame when such applications can be filed and increasing the fees for such filings.

Although the specific questions posed do not single out patents of the pharmaceutical industry nor include a comparison of such patents to non-U.S. counterpart patents, the incentive for the RFC, which typically precedes a notice of proposed rulemaking, seems to signal an attempt to change the

current patent practices of the pharmaceutical industry.

In sum, similar to the USPTO Notice on disclosure requirements, although all technologies are included, the RFC appears to be directed most specifically to brand name pharmaceutical companies. Is the RFC another a shot over the bow of the brand name pharmaceutical companies' patent filing and prosecution strategies? Is this more signaling of the beginning of higher scrutiny for their patent applications and the "patent thickets" they create? If so, will such scrutiny permit generics to enter the marketplace earlier, to meet the Administration's objectives? Again, only time will tell.

[USPTO Publishes Notice Calling Out Pharmaceutical Industry](#)



President Biden's *Executive Order on Promoting Competition in the American Economy*, 86 FR 36987 (2021), expressed concerns about the patent system being misused to unnecessarily inhibit or delay entry of generic drugs or biologics to the marketplace for years, denying Americans access to lower cost drugs. The President called for action "to help ensure that the patent system, while incentivizing innovation, does not unjustifiably delay generic drug or biosimilar competition beyond that reasonably contemplated by applicable law."

The Food and Drug Administration (FDA) was charged with the task of identifying any concerns with the patent system being used in such an unjustified way. To this end, the FDA reached out to the U.S. Patent and Trademark Office (USPTO) in a cooperative spirit to promote further interactions to better understand their overlap in work and information, particularly where inconsistent statements might be made to each agency.

In response to the President and the FDA's outreach, the new Director of the USPTO, Katherine Vidal, published in the Federal Register (87 FR 45764 (July 29, 2022)) a stern reminder regarding the duties of disclosure and reasonable inquiry during examination of a patent application, including reexamination, reissue, and proceedings before the Patent Trial and Appeal Board (PTAB). The justification is to provide examiners and judges with all the material information needed to decide on patentability of a claimed invention. Consequently, more robust and reliable patents should result, which is better for the public.

The Notice reminds us of who has duty to disclose material information and what material information needs to be disclosed. In essence, anyone associated with the prosecution of a patent application or involved in the examination of a patent before the USPTO or PTAB is required to

disclose to the patent examiner or administrative law judge information that would be material to the patentability of the claimed invention. Material information could include communications from other government agencies, for example, from the FDA.

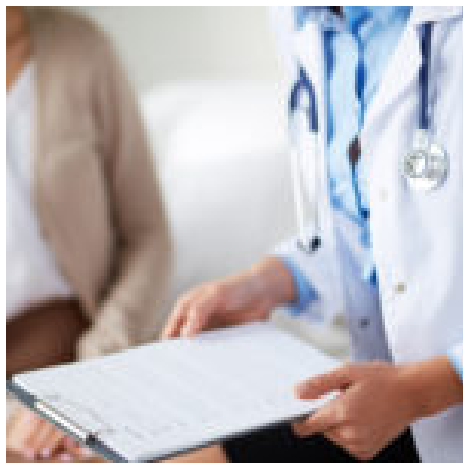
The Notice also details what is the duty of reasonable inquiry. For example, a party filing a paper with the USPTO has a duty to perform an inquiry as reasonable under the circumstances, which may include reviewing documents received from another government agency, for example, the FDA. If the document is material to patentability, then the document must be appropriately submitted to the USPTO.

The final section of the Notice is under the heading, "When the Duties of Disclosure and Reasonable Inquiry Arise in Dealings With Other Government Agencies," which section emphasizes the consistency of statements made to different agencies and the need to correct statements later learned to be incorrect at the time they were made. Activities and publications associated with testing, marketing, and commercialization by a patentee or patent applicant can also be material to patentability and must be disclosed. Examples also include information learned from a generic company filing an Abbreviated New Drug Application (ANDA) and namely, a paragraph IV certification alleging that the patent(s) covering the brand name drug product are invalid. The prior art cited in the ANDA certification must be cited to the USPTO unless cumulative to publications already cited.

Of particular note is the discussion of inequitable conduct when inconsistent positions were taken before the USPTO and the FDA. The Notice details a number of examples of where inconsistent statements led to detrimental effects for the malfeasance. The Notice further warns that attempts to wall off patent practitioners from the FDA lawyers to prevent learning of possible material information are inappropriate and likely will have dire consequences. "By following the guidance in this notice, it is expected that patent applicants can obtain more reliable patent protection and avoid the findings of inequitable conduct and sanctions noted [herein]."

In sum, although all technologies are included, the Notice appears to be directed most specifically to brand name pharmaceutical companies and their dealings with the USPTO and FDA. Is the Notice a shot over the bow of the brand name pharmaceutical companies' patent filing and prosecution strategies? Is this signaling the beginning of higher scrutiny for their patent applications and the "patent thickets" they create? If so, will such scrutiny permit generics to enter the marketplace earlier, which ultimately could mean cheaper medicines sooner, meeting the Administration's objectives? Only time will tell.

Common Bioresearch Monitoring Violations: Updates from FY 2021 to Now



The Bioresearch Monitoring Program (BIMO), run by the U.S. Food and Drug Administration (FDA), oversees the conduct of on-site inspections and data audits of FDA-regulated research in support of new product development and marketing approvals. As a follow up to our [July 2021 post](#), we highlight here the most common violations FDA's BIMO identified in Fiscal Year (FY) 2021 along with those we have seen so far in FY 2022. Our review focuses on BIMO's clinical investigator, sponsor, and contract research organization (CRO) inspection outcomes across 516 inspections conducted in FY 2021, as these comprised nearly 85 percent of all BIMO inspections.

Amongst these, 81 percent did not result in any findings of noncompliance. Eighteen percent resulted in findings of noncompliance but without recommending regulatory action, and about one percent resulted in findings of noncompliance recommending official regulatory action. In FY 2021, the most common violations leading FDA to issue a Form FDA 483, FDA's official form for documenting noncompliant inspection findings, included:

- **Failure to submit an IND application.** For example, FDA issued several Warning Letters for investigations of dietary supplements or foods determined by the FDA to be drugs. FDA found that the study designs demonstrated the investigational products were intended to cure, mitigate, and/or treat a disease or condition, triggering application of FDA's drug authorities and requiring an Investigational New Drug (IND) application to be in place before conducting the research.
- **Failure to follow the investigational plan and implement corrective or preventive action plans.** For example, in one [Warning Letter](#) resulting from a BIMO inspection, the FDA noted that the investigator failed to exclude subjects according to the study's exclusion criteria and did not identify any procedures in place to prevent future violations.
- **Inadequate or inaccurate recordkeeping (including case histories, study records, and drug disposition records).** For example, in one recent [Warning Letter](#) following a BIMO inspection, the FDA noted that a study site failed to retain necessary documents for 2 years following marketing approval when it could not locate informed consent forms and case report forms, amongst others, from a study for which a Biologics License Application was pending.

Of note, these continue to be the most frequently cited violations in BIMO Warning Letters issued to date in 2022. To avoid these missteps and better understand the scope of their respective responsibilities before, during, and after a clinical trial, sponsors, CROs and investigators should review [FDA's BIMO Compliance Program Guidance Manuals](#) and ensure adoption of standard operating procedures (SOPs) that provide an infrastructure for regulatory compliance. Sponsors and investigators should also ensure that they understand when an IND application is required, and review the requirements for appropriate recordkeeping during and after a clinical trial. Finally,

sponsors and CROs should have mechanisms in place to both promote protocol adherence and promptly respond to any deviations when they inevitably occur. Sponsors receiving BIMO Form FDA 483s should respond with a detailed explanation of their root cause findings, corrective actions, and their plan to prevent similar missteps in the future. The Goodwin FDA team works closely with sponsors to apply FDA's Good Clinical Practice requirements and to resolve BIMO inspection findings when they occur.

[Connect](#) with our Goodwin FDA team to learn more.

*Maura Friedlander, a 2022 summer associate in Goodwin's Washington, D.C. office, contributed to this post.

[Potential AI/ML Learnings to Come from FDA Public Advisory Committee Meeting on Skin Lesion Analyzer Technology in Late July](#)



On July 28, 2022, the U.S. Food and Drug Administration (FDA) will hold a public advisory committee meeting to discuss skin lesion analyzer (SLA) technology and its application to detecting skin cancers in various patient care settings. This meeting of the General and Plastic Surgery Devices Panel of the Medical Devices Advisory Committee will focus on algorithm-based SLA devices for adjunctive detection of skin lesions, including skin cancers, and stands to provide industry another layer of thinking on FDA's perspective on artificial intelligence and machine learning (AI/ML) device technologies.

In announcing this meeting, FDA explained that in recent years it has observed an increased interest in SLA devices employing AI/ML. The agency is seeking expert input from the panel on approaches to evaluate the performance of SLA devices, which have a range of technologies and indications.

The committee will discuss and provide recommendations to FDA on: (1) the diagnosing standard, or ground truth, that should be used as a comparison for the performance of diagnostic devices, e.g., histology, consensus opinion of a panel of dermatologists, opinion of a single dermatologist, or other means; (2) acceptable sensitivity and specificity thresholds based on the target diagnosis (melanoma, basal cell carcinoma, squamous cell carcinoma) or intended user (dermatologist, primary care physician, lay user); (3) patient characteristics, including lower or higher incidence populations, that should be tested before marketing; and (4) the balance of increased access with risk mitigation measures that are appropriate when the devices are used by lay people, by populations with very high or very low incidence of melanoma, by populations with low incidence, but high mortality associated with melanoma, or by the target diagnosis/lesion type.

Additionally, on July 29, 2022, the committee will discuss the possible reclassification of two class III, PMA approved computer-aided melanoma detection devices, MelaFind (P090012) and Nevisense (P150046), both of which are intended for use on cutaneous lesions suspicious for melanoma when a dermatologist chooses to obtain additional information when considering biopsy. According to the FDA announcement, “The committee will discuss if there is sufficient information to reclassify computer-aided devices for adjunctive diagnostic information of lesions suspicious for melanoma from class III to class II, and what special controls may be appropriate to provide reasonable assurance of safety and effectiveness” if they are reclassified.

This meeting, and any actions the FDA takes as a result, could offer industry further insight into the FDA’s approach to regulating AI/ML diagnostic and screening products more broadly.

The meeting will be held virtually on July 28, 2022, from 9 am to 5:45 pm ET and July 29, 2022, 9 am to 4 pm ET. Comments received on or before July 11, 2022 will be provided to the committee and the public docket will remain open for comment for FDA’s consideration until August 29, 2022.

For more information see the [Meeting Notice on the Federal Register](#).

[Brian Burgess to Speak on Emerging Legal Issues and Trends for Interchangeable Biosimilars at FDLI Annual Conference](#)



The annual Food & Drug Law (FDLI) conference will be held on June 14-15, bringing together experts from the federal government, industry, the private bar, non-profit, patient and consumer advocates, consulting organizations, and academia to address complex legal, regulatory, compliance, and policy issues facing the FDA-regulated industry. Goodwin is a proud sponsor of the conference and partner **Brian Burgess** is a featured speaker on the panel, **[Interchangeable Biosimilars - Emerging Legal Issues and Trends](#)**. During this session, the speakers will discuss what can be learned from the first interchangeable approvals and what it tells us about FDA’s interchangeability framework. The speakers will also address what the competitive landscape for biologics looks like, how the statutory standard regarding “any given patient” may play out, and whether applicants will be able to use real world evidence to support interchangeable licensure.

Let our Goodwin team **know** if you will be attending the FDLI Annual Conference. For additional information about the conference, please click **[here](#)**.

Clinical Trial Diversity Planning for Sponsors: What to Know About FDA's Recent Draft Guidance



On April 13, 2022, the U.S. Food and Drug Administration (“FDA”) issued a [draft guidance](#) providing specific recommendations to the industry on how to improve diversity in clinical trials. The FDA’s focus on increasing racial and ethnic diversity in clinical trials is not new, with the agency issuing several guidances since 2016 on this topic.¹ However, the recent draft guidance sets out new expectations for sponsors conducting clinical trials intended to support marketing authorization of drugs, biologics, and medical devices.

Read the [client alert](#) by FDA Senior Associate [Elizabeth Mulkey](#) and Partner [Alexander Varond](#).