

| Catalyst Type Group | Catalyst Type | Definition |
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| Company | Analyst/R&D Update | This catalyst type monitors upcoming analyst or R&D days within the pharma/biotech space. |
| Company | Divestment/Spinoff | Company announces that a portion of its business will be divested/spun-off |
| Company | Earnings Announcement | This catalyst type tracks all upcoming earnings announcement of public companies. |
| Conference | Investor Conference | This catalyst type monitors an upcoming investor conference |
| Conference | Medical Conference | This catalyst type monitors an upcoming medical conference |
| Other | Other | Any catalyst that does not fall into any other specified category |
| Partnership | Acquisition Completion | Upcoming completion of transaction or deal of company acquiring another company or drug |
| Partnership | New | A company publically announces they are seeking a partnership. |
| Partnership | New (Emerging Markets) | A company publically announces they are seeking a partnership in an emerging market. |
| Partnership | Option Exercise Decision | A decision made by a company to exercise its option in an agreement with another company, to either further develop or manufacture a certain compound or acquire a certain technology |
| Partnership | Option Exercise Decision (Emerging Markets) | A decision made by a company to exercise its option in an agreement with another company, to either further develop or manufacture a certain compound or acquire a certain technology that happens outside of the major markets (i.e. BRIC, etc.) |
| Patent | Examination Update | An update from the examination of a patent application |
| Patent | Expiration | Upcoming date in which the patent (or pediatric exclusivity period) expires or is no longer valid |
| Patent | Litigation Update | Court decisions and rulings |
| Patent | Litigation Update (Emerging Markets) | Court decisions and rulings within the emerging markets |
| Patent | USPTO Action | A USPTO action is written correspondence from the patent examiner that requires a properly signed written response from the applicant in order for prosecution of the application to continue. Examples of Office actions include a restriction requirement, a non-final Office action, and a final Office action. |
| Progress Update | Development Review | Progress of overall clinical development program, relates to its path to registration |
| Progress Update | Development Review (Emerging Markets) | Progress of overall clinical development program, relates to its path to registration in the emerging markets |

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| Progress Update | Hospital/Health System Product Launch | As opposed to a “Progress Update - Product Launch” catalyst, this is used when a company plans to launch a product noting a specific hospital or healthcare system instead of a broader commercial availability. Often used for larger device systems. |
| Progress Update | Manufacturing/Supply | Company update on issues regarding the ability to produce or supply drug. Often pertains to manufacturing plant issues and resulting contamination. |
| Progress Update | Manufacturing/Supply (Emerging Markets) | Company update on issues regarding the ability to produce or supply drug in a nonmajor market (i.e. BRIC, etc.) Often pertains to manufacturing plant issues and resulting contamination. |
| Progress Update | Product Launch | Company anticipates launch of approved drug for sale in an unspecified region or market |
| Progress Update | Product Launch (Australia) | Company anticipates launch of approved drug for sale in Australia |
| Progress Update | Product Launch (Canada) | Company anticipates launch of approved drug for sale in Canada |
| Progress Update | Product Launch (Emerging Markets) | Company anticipates launch of approved drug for sale in the emerging markets |
| Progress Update | Product Launch (Europe) | Company anticipates launch of approved drug for sale in Europe |
| Progress Update | Product Launch (Europe) - Individual Country | Company anticipates launch of approved drug for sale in an individual country in Europe |
| Progress Update | Product Launch (Japan) | Company anticipates launch of approved drug for sale in Japan |
| Progress Update | Product Launch (U.S.) | Company anticipates launch of approved drug for sale in the US |
| Progress Update | Product Relaunch | If product was previously removed from market temporarily for any reason, this catalyst tracks the upcoming relaunch |
| Regulatory | 510(k) Clearance | This catalyst type tracks an upcoming 510(k) clearance for a specific device. |
| Regulatory | 510(k) Filing | This catalyst type tracks an upcoming 510(k) filing for a specific device, as specified by the company. |
| Regulatory | 510(k)/PMA Approval Decision | This catalyst type tracks an upcoming 510(k) or PMA approval decision for a specific device. This catalyst is used when the company does not specify the type of filing. |
| Regulatory | 510(k)/PMA Filing | This catalyst type tracks an upcoming 510(k) or PMA filing for a specific device. This catalyst is used when the company does not specify the type of filing. |
| Regulatory | Approval (Australia) | Anticipated approval by the Australian Health Practitioner Regulation Agency of a New Drug Submission |
| Regulatory | Approval (Canada) | Anticipated approval by Health Canada of a New Drug Submission |

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| Regulatory | Approval (Europe) - Individual Country | Anticipated approval in single European country where company has filed application (decentralized procedure) |
| Regulatory | Approval Decision (Emerging Markets) | Anticipated approval decision by a regulatory body to market a drug in a nonmajor market (i.e. BRIC, etc.) |
| Regulatory | Approval Decision (Europe) | Anticipated approval decision by the EMA |
| Regulatory | Approval Decision (Japan) | Anticipated approval decision by the MHLW or PMDA of a Japanese marketing application |
| Regulatory | CE Mark Approval | Anticipated approval of the CE mark indicating a product's compliance with EU legislation and enabling the free movement of products within the European market. |
| Regulatory | CE Mark Filing | Anticipated filing of the CE mark, a mandatory conformity marking for certain products sold within the European Economic Area (EEA) |
| Regulatory | CLIA Waiver Designation | Clinical Laboratory Improvement Amendments (CLIA) are United States federal regulatory standards that apply to all clinical laboratory testing performed on humans in the United States, except clinical trials and basic research. Tests and test systems that meet risk, error, and complexity requirements are issued a CLIA certificate of waiver. |
| Regulatory | CLIA Waiver Submission | Anticipated submission of CLIA waiver so that clinical tests can become available for use in physician offices, clinics and other public health settings as well. |
| Regulatory | De Novo Approval Decision | Anticipated decision on the De Novo application filed for approval of a new device that has no predicate device to use for approval (different process than PMA and 510k) |
| Regulatory | De Novo Request Filing | A request for the FDA to make a risk-based evaluation for classification of the device into Class I or II |
| Regulatory | European Regulatory Communication | A letter or a press release issued by CHMP relating to the review of a drug |
| Regulatory | FDA Advisory Panel Brief | Briefing documents from FDA site for upcoming Advisory Committee meeting |
| Regulatory | FDA Advisory Panel Meeting | A meeting held by an FDA Advisory Committee to discuss an NDA/BLA and the drug's risk-benefit profile. At the end of the meeting, the panel votes on recommending approval |
| Regulatory | FDA Response | FDA issues a response to communication from Company. Does not include formal FDA meetings |
| Regulatory | Filing for Approval (Australia) | Anticipated filing for approval in Australia |
| Regulatory | Filing for Approval (Canada) | Anticipated filing for approval in Canada |
| Regulatory | Filing for Approval (Emerging Markets) | Anticipated filing for approval in a nonmajor market (i.e. BRIC, etc.) |

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| Regulatory | HDE Approval Decision | Humanitarian device exemption (HDE) application is approved by the FDA. An HDE is similar in both form and content to a premarket approval (PMA) application, but is exempt from the effectiveness requirements of a PMA. An HDE application is not required to contain the results of scientifically valid clinical investigations demonstrating that the device is effective for its intended purpose. The application, however, must contain sufficient information for FDA to determine that the device does not pose an unreasonable or significant risk of illness or injury, and that the probable benefit to health outweighs the risk of injury or illness from its use, taking into account the probable risks and benefits of currently available devices or alternative forms of treatment. Additionally, the applicant must demonstrate that no comparable devices are available to treat or diagnose the disease or condition, and that they could not otherwise bring the device to market. |
| Regulatory | HDE Modular Filing | The modular HDE review process is based on a submission of individual sections or “modules” that constitute a complete HDE submission once all have been submitted. The modular approach allows the FDA to review each module separately, allowing the applicant to receive timely feedback and potentially resolve any deficiencies earlier in the review process compared to a traditional HDE application. Upon receipt of the final module, the FDA will make a filing decision that, if positive, triggers the HDE 75-day review clock for an approval decision. |
| Regulatory | HDE Modular Filing Completed | The modular HDE review process is based on a submission of individual sections or “modules” that constitute a complete HDE submission once all have been submitted. The modular approach allows the FDA to review each module separately, allowing the applicant to receive timely feedback and potentially resolve any deficiencies earlier in the review process compared to a traditional HDE application. Upon receipt of the final module, the FDA will make a filing decision that, if positive, triggers the HDE 75-day review clock for an approval decision. |
| Regulatory | HDE Submission | Humanitarian device exemption (HDE) application filing to the FDA. An HDE is similar in both form and content to a premarket approval (PMA) application, but is exempt from the effectiveness requirements of a PMA. An HDE application is not required to contain the results of scientifically valid clinical investigations demonstrating that the device is effective for its intended purpose. The application, however, must contain sufficient information for FDA to determine that the device does not pose an unreasonable or significant risk of illness or injury, and that the probable benefit to health outweighs the risk of injury or illness from its use, taking into account the probable risks and benefits of currently available devices or alternative forms of treatment. Additionally, the applicant must demonstrate that no comparable devices are available to treat or diagnose the disease or condition, and that they could not otherwise bring the device to market. |
| Regulatory | IDE Approval Decision | FDA approval of an IDE submission allows the initiation of subject enrollment in a clinical investigation of a significant risk device. This guidance is intended to provide clarification regarding the regulatory implications of the decisions that FDA may render based on review of an IDE as well as a general explanation of the reasons for those decisions. |
| Regulatory | IDE Request for Additional Information | Additional information required by the FDA to be submitted before making a decision on the IDE application. |

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| Regulatory | IDE Submission | Anticipated submission of IDE, which if approved, allows the initiation of subject enrollment in a clinical investigation of a significant risk device. |
| Regulatory | Market Removal Hearing | Advisory committee meeting on removal of an approved drug and/or indication from the market |
| Regulatory | Meeting with European Medicines Agency | Any meeting occurring with the EU regulatory authority |
| Regulatory | Meeting with FDA | Any meeting occurring with the FDA, includes but is not limited to end of Phase II meetings |
| Regulatory | Other | An anticipated regulatory update that does not fall into any other specified regulatory category |
| Regulatory | PMA Approval Decision | An approved Premarket Approval Application (PMA) like an approved New Drug Application (NDA) is, in effect, a private license granted to the applicant for marketing a particular medical device. PMA approval is based on a determination by FDA that the PMA contains sufficient valid scientific evidence to assure that the device is safe and effective for its intended use(s). |
| Regulatory | PMA Approval Decision (Japan) | The Pharmaceuticals and Medical Devices Agency (PMDA) is the regulatory body in Japan which controls the marketing of medical devices. The regulatory pathway for “highly controlled medical devices” requires the submission of a Premarket Approval Application with the PMDA, a review, and approval before a device can be brought to market. |
| Regulatory | PMA Filing | Anticipated filing of a Premarket Approval Application (PMA) to the FDA. The filing of an application means that FDA has made a threshold determination that the application is sufficiently complete to begin an indepth review. Within 45 days after a PMA is received by FDA, the agency will notify the applicant whether the application has been filed. The letter will include the PMA reference number and the date FDA filed the PMA. Expedited review status, if appropriate, may be communicated at this time. The date of filing is the date that a PMA accepted for filing was received by the agency. The 180day period for review of a PMA starts on the date of filing. |
| Regulatory | PMA Filing (Japan) | The Pharmaceuticals and Medical Devices Agency (PMDA) is the regulatory body in Japan which controls the marketing of medical devices. The regulatory pathway for “highly controlled medical devices” requires the submission of a Premarket Approval Application with the PMDA, a review, and approval before a device can be brought to market. |
| Regulatory | PMA Modular Filing | In a Modular PMA the complete contents of a PMA are broken down into well delineated components (or module) and each component is submitted to FDA as soon as the applicant has completed the module, compiling a complete PMA over time. The PMA is viewed as a compilation of sections or “modules,” such as preclinical, clinical, manufacturing, that together become a complete application. This method is recommended for products that are in early stages of clinical study. This method is not appropriate when the applicant is very close to being ready to submit a PMA or when the device design is in a state of flux or likely to change. |

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| Regulatory | PMA Modular Filing Completed | The process begins with a PMA Shell which lays out the plan for submission of the modules. The shell is an outline of modules and identifies information necessary to support the filing and approval of a specific Class III product through a combined IDE-PMA process. The review team will work with applicants to develop a customized shell for each specific product that includes module contents and suggested timelines. It is developed individually with the manufacturer for a specific device. |
| Regulatory | PMA Supplemental Approval Decision | A PMA supplement approval is the FDA approval of the submission required for a change affecting the safety or effectiveness of the device for which the applicant has an approved PMA; additional information provided to FDA for PMA supplement under review are amendments to a supplement |
| Regulatory | PMA Supplemental Filing | A PMA supplement filing is the submission required for a change affecting the safety or effectiveness of the device for which the applicant has an approved PMA; additional information provided to FDA for PMA supplement under review are amendments to a supplement |
| Regulatory | Pre-IDE FDA Response | In order to facilitate the initiation of clinical trials under the IDE regulation, the Food and Drug Administration (FDA) encourages sponsors to begin communicating with the ODE reviewing division prior to the submission of the original IDE application. This communication may take the form of a "PreIDE" meeting and/or a "PreIDE" submission. The FDA response refers to the FDA's communication. |
| Regulatory | Pre-IDE Submission | FDA Response In order to facilitate the initiation of clinical trials under the IDE regulation, the Food and Drug Administration (FDA) encourages sponsors to begin communicating with the ODE reviewing division prior to the submission of the original IDE application. This communication may take the form of a "PreIDE" meeting and/or a "PreIDE" submission. |
| Regulatory | Progress Update | Any regulatory update that does not fall into any other specified event types |
| Regulatory | Progress Update (Emerging Markets) | Any regulatory update in a nonmajor market that does not fall into any other specified event types |
| Regulatory | Treatment Guidelines Announcement | An announcement sometimes issued by company or association/organization relating to changes in treatment recommendations or instructions |
| Reimbursement | Individual Country (Emerging Markets) Decision | Specific Emerging Market Country health care organization or private insurer deciding whether to pay for a drug's costs, in part or in full. |
| Reimbursement | Individual Country (Europe) Decision | Any European Country (excluding the UK's NICE) national health insurance deciding whether to cover a drug's cost, or limiting/reducing the reimbursement previously allotted (e.g. IQWiG, SMC, AWMSG) |
| Reimbursement | Individual Country (Other) Decision | A non-EU and Non-Emerging Market country's health insurer or private payer deciding whether to reimburse a drug's cost, or limit/reduce the previously stated reimbursement (e.g. Canada, Australia, etc.) |

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| Reimbursement | Medicare/Payer (US) Decision | Medicare, large private health insurance payer (Aetna etc.) or other payment agency or body in the U.S. (VA Hospitals VANF) deciding whether to reimburse a drug's care, or reduce the previously allotted amount for reimbursement |
| Reimbursement | NICE (UK) Guidance | National Institute for Clinical Excellence (NICE), the U.K. health care agency, deciding whether to reimburse a drug's costs. This includes draft guidance or final decision. |
| Reimbursement | Progress Update | Anything related to a decision being made by a health care insurer or government agency that is not a positive or negative decision. This could include a Medicare proceeding on reimbursement, a statement that a payer will reexamine a decision or any other nondeciding reimbursement event |
| Reimbursement | Reimbursement Decision (Japan) | Japan's health insurance agencies deciding whether to reimburse a drug's cost, or expand the already allotted reimbursement (e.g. Added to NHI price listing) |
| Trial Announcement | Dosing Completed | Time at which all enrolled patients have completed full treatment in study |
| Trial Announcement | Data Monitoring Board Analysis | Interim analyses of trial data conducted by medical, surgical and statistical experts selected by company to serve as an independent monitoring board, will make recommendations to continue or stop trial |
| Trial Announcement | Expanded Access Program | Designed to make products available as early in the device evaluation process as possible to patients without therapeutic options, either because they have exhausted or are intolerant of approved therapies |
| Trial Announcement | First-In-Human Implant | When a company expects to perform an implant of a device (ie. stent, scaffold, valve, etc.) for the first time in humans. |
| Trial Announcement | Go/No-Go Decision | Anticipated decision from the Company regarding the advancement of a clinical program or trial |
| Trial Announcement | Hold Lifted | A clinical hold is an order issued by FDA to the company to delay a proposed clinical investigation (subjects may not be given investigational drug) or to suspend an ongoing investigation (no new subjects may be recruited and placed on investigational drug/patients already in study should be taken off therapy involving investigational drug) unless specifically permitted by FDA in the interest of patient safety. FDA may lift the hold when the grounds for the hold no longer apply |
| Trial Announcement | Initiation | Anticipated start of a clinical trial, where the first patient is enrolled or dosed |
| Trial Announcement | Initiation (Emerging Markets) | Anticipated start of a clinical trial in a nonmajor market (i.e. BRIC, etc.), where the first patient is enrolled or dosed |
| Trial Announcement | Other | Any trial announcement that does not fall into any other specified category |
| Trial Announcement | Patient Enrollment Completed | Anticipated completion of full accrual or enrollment goal for a trial |

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| Trial Announcement | Resume Trial | Anticipated reinitiation of a trial that had been halted or suspended |
| Trial Announcement | Trial Completion | Anticipation of all patients in trial have completed the trial, including followup |
| Trial Announcement | Trial Completion (Emerging Markets) | Anticipation of all patients in a trial in a nonmajor market (i.e. BRIC, etc.) have completed the trial, including followup |
| Trial Data | Final Results | Upcoming data that can be explicitly stated as "final analysis" |
| Trial Data | Other | Any upcoming data that does not fall under any other specified category. Often used for preclinical data or vaguely described data |
| Trial Data | Published Results | Any upcoming data that is published in a journal or publication, this will typically be a "final analysis" |
| Trial Data | Top-Line Results | Anticipated first mention of clinical efficacy data, falls under "interim analysis" |
| Trial Data | Updated Results | Upcoming updated clinical data from topline, also falls under "interim analysis", can include more patients, longer treatment, followup, etc. |
| Trial Data | Trial Data (Emerging Markets) | Any upcoming data for a trial that is being conducted in a nonmajor market (i.e. BRIC, etc.) |