Oncology Off-label Uses: The Deeper Level of Evidence Your Team and Patients Need

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In 2015, the Lexi-Drugs® core drug information database of Lexicomp® was officially recognized by the Centers for Medicare & Medicaid Services (CMS) as an approved compendium for off-label uses of oncology drugs. This has enormous implications for the safe treatment of your patients and for providing guidance regarding reimbursement.

Lexicomp drug content undergoes a rigorous multi-part development and review process before it is included in our solutions. Achieving compendia status for oncology drugs necessitates following an even more stringent process than our standard practices when adding off-label oncology drug use content to the database. After performing an exhaustive search of the medical literature and thoroughly evaluating the data, a select panel of oncologists and oncology clinical pharmacy specialists, including internal contributors and outside experts, must approve a “medically-accepted indication” of an oncology medication by a majority vote before it can be included in the Lexicomp database.

Multidisciplinary healthcare teams must consider the safety, efficacy, administration requirements, and potential reimbursement of cancer treatments. In order to navigate the complicated nature of oncology drugs, chemotherapy drug regimens, and the labeled and off-label treatment options, healthcare professionals require high-level, evidence-based information and evaluation to inform their decision-making process.
In fact, a recent systematic review of the literature of off-label drug use in oncology calls for “greater scrutiny and robust clinical guidance to establish the favorable benefit-risk ratio for patients at the time of prescribing at each level of oncology care to facilitate rational off-label prescribing.”

The expertise of the oncology pharmacy editorial team allows for the creation and maintenance of Lexicomp drug monographs at a higher recognized standard, thus providing clinicians with information that is timely and relevant, backed by evidence which demonstrates that benefit outweighs risks, thus optimizing patient care.
Off-Label Use Volume

Oncology drugs are frequently used off-label. In fact, some agents may have more off-label uses than labeled uses. Older chemotherapy drugs can easily have multiple off-label uses, both in adult and pediatric patients, compared with only two or three labeled uses. The longer these drugs are available, the more likely that therapeutic uses will be studied for them; however, rarely are these later uses put through the process required for official FDA labeling.

With the sheer number of off-label oncologic uses, it is essential to update oncology drug monographs, particularly those of older drugs, with contemporary literature, so clinicians feel confident their care decisions are based on the latest evidence and best practices.
Reimbursement

As an official compendium, Lexicomp has in place multiple layers of literature evaluation and review processes that are approved by CMS and supported by a high level of evidence (LOE). While reimbursement is a complex, multivariate process, Lexicomp LOE ratings, when weighed in conjunction with local coverage determinations, can be used to help guide and troubleshoot potential reimbursement questions.

For example, if a care team is considering treating a patient with a drug that Lexicomp has reviewed as having a LOE grade of “A” for a particular off-label use, it is more likely that drug will be covered by insurers for that off-label use than if it had a lower LOE. Clinicians can feel more confident in the treatment’s efficacy and in the likelihood of reimbursement.

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Preparation for Administration

The Preparation for Administration field in the Lexicomp drug monograph is a key component of the oncology pharmacy team’s work. This field is not available in abbreviated monograph presentations, such as the foundational Lexicomp drug information accessible within UpToDate®. It is, however, a valuable field as it pertains to the safety of both patients and healthcare workers.

Preparation for Administration is written and reviewed by a team of oncology pharmacists and takes into account drug reconstitution and dilution, type of infusion container, and other key safety issues relating to oncology drug properties. If not prepared correctly, these agents may be hazardous to the healthcare workers who are preparing and/or administering the drug.

An off-label use (particularly of an older oncology medication) may occasionally require a different formulation or route of administration than the FDA-approved labeled use. Careful attention must be paid to preparation and safety concerns.

Lexicomp also allows users to link to a Safe Handling of Hazardous Drugs appendix topic, which provides information relating to hazardous drugs, including designation of hazardous drug status and how to handle hazardous drugs for receiving, storage, preparation, and administration.
Case Study: Bortezomib

One drug monograph example that illustrates the depth of information provided in an official compendium is the proteasome inhibitor bortezomib.

A thorough bortezomib monograph is accessible from within UpToDate. It notes both subcutaneous and intravenous (IV) dosage forms of the drug and includes both its labeled uses (treatment of mantle cell lymphoma and multiple cell myeloma) and six off-label uses, including antibody-mediated rejection (AMR) in cardiac transplantation and treatment of cutaneous T-cell lymphomas. This is ample information for some clinicians who might come into contact with a patient using the drug.

However, in Lexicomp, the bortezomib monograph contains additional fields and data that further describe the use of this agent in the medical literature. For example:

- The six off-label uses also feature summaries of evidence and links to references
- Preparation for Administration field, not available in UpToDate, explains that the IV and subcutaneous dosage forms need to be reconstituted differently

This enables the oncology care team to take a more detailed look at the treatment options and the safety concerns surrounding the drug and its off-label uses and administration.
In summary, Lexicomp enables clinicians to access a wider range of information on off-label oncology drug uses backed by a stringent review of contemporary literature and held to a high standard to achieve top LOE ratings. And that helps inform effective treatment decisions, provides insight into reimbursement, supports research, and gives important preparation information to help keep both patients and healthcare workers safe.

To learn more, see the Lexicomp off-label uses policy and compendia transparency document.

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