

How drugs get those tongue-twisting generic names

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Oseltamivir. Esomeprazole. Trastuzumab. Where do drugs get those odd-sounding generic names? The answers are in the current issue of *Chemical & Engineering News (C&EN)*, the weekly newsmagazine of the American Chemical Society, the world's largest scientific society, which explains the logic behind the tongue-twisters.

C&EN Associate Editor Carmen Drahl explains that until 1961 there was no standard for assigning drugs generic names, which are different from brand names like Tamiflu ([oseltamivir](#)), Nexium (esomeprazole) and Herceptin ([trastuzumab](#)). That's when three medical organizations created the U.S. Adopted Names (USAN) Council to assign simplified alternatives to the unwieldy proper names the International Union of Pure & Applied Chemistry gives to molecules. For instance, under USAN's guidance, "cis-8-methyl-N-vanillyl-6-nonenamide" becomes "zucapsaicin." The council recommends generic names to an international agency of the World Health Organization. The tongue-twisting words the USAN Council creates are products of "stems" that describe a drug's characteristics, which Drahl likens to the Latin and Greek roots of many English words.

Drahl writes that these stems describe everything from a drug's function to its shape. For instance, the "-prazole" ending of Nexium's generic name, esomeprazole, reveals that it is a type of antiulcer medication. Similar drugs will have the same stems in their names, allowing those familiar with the stems to crack the code. The USAN Council is careful to avoid words that are difficult to pronounce in foreign languages or

that may have other meanings abroad. Sometimes, Drahl notes, a generic name will also include hints about its developer that a [drug](#) company has suggested to the council, as in carfilzomib, which recognizes molecular biologist Philip Whitcome and his wife Carla.

More information: Where Drug Names Come From - cen.acs.org/articles/90/i3/Drug-Names-Come.html

Provided by American Chemical Society

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