

## **INFORMATION PROVIDED BY THE FDA TO COMMITTEE STAFF RE DRUG EFFICACY STUDY IMPLEMENTATION (DESI) PROGRAM**

*On January 11, 2016, Majority Committee staff submitted by email a few questions to the Food and Drug Administration staff about the Drug Efficacy Study Implementation (DESI) program. Below are the FDA email responses to the questions.*

**From:** FDA staff  
**Sent:** Tuesday, March 08, 2016 3:12 PM  
**To:** Committee staff, FDA staff  
**Cc:** FDA staff  
**Subject:** RE: DESI Drugs

Here you go, \_\_\_\_\_. Please let me know if you would like to schedule a briefing with our subject matter experts, in follow-up to this.

### **For how many DESI drugs have there been successful NDA filings?**

Approximately 3,400 drug products intended for use in humans were reviewed under the Drug Efficacy Study Implementation (DESI) program. These prescription drugs had been approved for safety only and collectively had more than 16,000 indications. The Food and Drug Administration (FDA) requested that firms submit data in support of the efficacy claims for their products. By 1984, of the approximately 3,400 products reviewed, approximately 2,225 had been found to be effective for one or more indications. FDA estimates that for every product with an approved safety-only new drug application (NDA), there were five identical, related, or similar (IRS) products on the market also subject to the DESI findings (21 CFR 310.6). In each instance where a product has been found effective under DESI, that product and those IRS to it could submit an application for approval based on the DESI efficacy finding, if they could meet the conditions for marketing for that particular category of product. Note that the IRS category of applications would also include abbreviated new drug applications (ANDAs) if drugs were identical to the subject of the DESI product. Drugs related or similar to DESI drugs would likely have been reviewed through the NDA process. As a result, for every one of the approximately 2,225 DESI closures where a drug has been found effective for one or more indications, it is possible that numerous NDAs and ANDAs have been reviewed and approved. The FDA does not currently track the number of NDAs or ANDAs approved for DESI drugs.

### **How many DESI drugs are still on the market?**

Fewer than a dozen DESI proceedings remain open or “pending,” covering approximately 20 active ingredients. FDA is actively working to close these proceedings. It has been FDA’s policy to allow continued marketing of drugs that are subject to a pending DESI proceeding.

A review of the National Drug Code (NDC) Directory on February 24, 2016, for the active ingredients in each of the open DESI proceedings indicated that there are slightly less than 250 different NDCs listed in the NDC Directory. These drugs include the products approved as safety-only and those IRS to those safety-only applications, as well as newer applications approved by FDA for both safety and efficacy. Approximately 50 of these NDCs are associated with FDA-approved products, and the remainder are unapproved while the DESIs remain open. These currently marketed products include a variety of strengths and dosage forms, different manufacturers, and different combinations of ingredients.

**From:** FDA staff  
**Sent:** Monday, March 28, 2016 8:48 AM  
**To:** Committee staff  
**Cc:** FDA staff  
**Subject:** RE: DESI Drugs

On March 8, 2016, FDA responded to questions you asked regarding past and ongoing DESI proceedings at the agency. As a follow-up, you asked that FDA provide an update on the status of the DESI proceedings listed in an attachment included with your email. The attachment was titled, “DESI Program, PENDING ACTIONS (August 2006).” FDA responds as follows:

1. **Anticholinergic/Barbituate Combinations (e.g., Donnatal); Docket No. FDA-1975-N-0336 (formerly 75N-0184); DESI 597.** This proceeding remains pending with an open hearing request.
2. **Donnatal Extentabs; Docket No. FDA-1975-N-0337 (formerly 75N-0223); DESI 597.** This proceeding remains pending with an open hearing request.
3. **Chloridiazapoxide hydrochloride and clidinium bromide (Librax); Docket No. FDA-1975-N-0336 (formerly 75N-0184); DESI 10837.** This proceeding remains pending with an open hearing request.
4. **Xanthine derivatives, ephedrine hydrochloride, phenobarbital, and guaifenesin; Docket Nos. FDA-1976-N-0272 (formerly 76N-0056), FDA-1976-N-0344**

- (formerly 76N-0057), and FDA-1978-N-0701 (formerly 78N-0070); DESI 1626. This proceeding was closed on January 10, 2014 (79 FR 1877).
5. **Theophylline, Ephedrine, and Barbiturate Combinations Docket No. FDA-1976-N-0272 (formerly 76N-0056); DESI 1626.** This proceeding was closed on January 10, 2014 (79 FR 1877).
  6. **Pentaerythritol tetranitrate (PETN) and Secobarbital (Docket No. 75N-0230; DESI 1786.** This proceeding remains pending with open hearing requests. Also, there is an open hearing request under DESI 1786 for Oral Extended-Release Nitroglycerin products; Docket FDA-1977-N-0356 (formerly 77N-0240); DESI 1786. The portion of DESI 1786 relating to transdermal system nitroglycerin products was closed on November 16, 2015 (80 FR 70822).
  7. **Isometheptene mucate, dichloralphenazone and acetaminophen (e.g. Midrin); Docket FDA-1975-N-0355 (formerly 75N-0203); DESI 3265.** This proceeding was closed on January 10, 2014 (79 FR 1877).
  8. **Cough/Cold products.** All proceedings relating to DESIs 6290, 6514, 11935, and 12152 were closed on January 1, 2011, and March 3, 2011 (76 FR 1175; 76 FR 11790).
  9. **Benzocaine, Butylamine benzoate, and tetracaine hydrochloride (e.g. Cetacaine); Docket 75N-0203; DESI 8076.** This proceeding remains pending with an open hearing request. (Please note that the DESI and docket numbers for the Cetacaine proceeding are incorrect in the 2006 Attachment to your March 9, 2016 email.)
  10. **Hydroxyzine hydrochloride intramuscular solution (e.g. Vistaril); Docket No. FDA-1978-N-0441 (formerly 78N-0324); DESI 10392.** This proceeding was closed on February 29, 2012 (77 FR 12310).
  11. **Trimethobenzamide hydrochloride suppository dosage form (e.g. Tigan suppositories); Docket No. FDA-1978-N-0224 (formerly 78N-0224); DESI 11853.** This proceeding was closed on April 9, 2007 (72 FR 17556). The 2006 Attachment to your March 9, 2016, email contains a reference to “78N-022,” which is not a complete docket number. Docket 78N-0227, DESI 11853, covered Tigan injection and capsule products and was closed on December 24, 2002 (67 FR 78476).
  12. **Oxytetracycline, sulfamethizole, and phenazopyridine (e.g. Urobiotic Capsules); Docket FDA-1983-N-0297 (formerly 83N-0030); DESI 50213.** This proceeding was closed on January 10, 2014 (79 FR 1877).

13. **Potaba (potassium p-aminobenzoate); Docket 77N-0183; DESI 7663.** This proceeding remains pending with an open hearing request.
14. **Vioform-HC; DESI 10367.** Appeal remains pending at the Office of the Commissioner.
15. **Vasodilan (Isoxsuprine); DESI 6403.** Appeal remains pending at the Office of the Commissioner.
16. **Mepergan Fortis (Promethazine and Meperidine); DESI 7337.** Appeal remains pending at the Office of the Commissioner.
17. **Pentaerythritol tetranitrate (PETN) DESI 1786.** Appeal remains pending at the Office of the Commissioner.

Please note that the 2006 attachment to your March 9, 2016 email did not include two other DESI proceedings that remain pending with open hearing requests.

They are:

Fixed-combination estrogen/androgen products; Docket No. FDA-1998-P-0083 (formerly 76N-0377); DESI 7661; and

Amphetamines indicated for the management of exogenous obesity; Docket No. 79N-0190; DESI 5378.