

Deep Brain Stimulation (DBS) for methamphetamine use disorder (MUD) is currently an **experimental treatment**. No company has regulatory approval (such as from the FDA or EMA) to market DBS devices specifically for this addiction.

However, several major medical device manufacturers and research institutions are actively involved in clinical trials to test its safety and efficacy.

1. Device Manufacturers (Hardware Providers)

These companies manufacture the implantable pulse generators and electrodes used in clinical trials. They are not "selling" the treatment for meth addiction commercially, but their devices are the ones being tested.

- **Medtronic (USA/Global)**
 - **Role:** The leading global DBS manufacturer. Their devices (specifically the *Percept* system, which can record brain signals) are currently being used in high-profile US-based clinical trials for methamphetamine addiction.
 - **Key Trial:** A major study at the **University of Colorado** is using Medtronic devices to target the nucleus accumbens (NAC) in patients with refractory methamphetamine use disorder.
- **Beijing PINS Medical Co., Ltd. (China)**
 - **Role:** A major Chinese neuromodulation company. PINS is highly active in the addiction space in China, where regulations regarding DBS for psychiatric indications have allowed for earlier and broader human trials.
 - **Key Partnership:** They work closely with **Ruijin Hospital** in Shanghai, which has conducted some of the world's first and largest trials for DBS in methamphetamine and opioid addiction.
- **SceneRay Corporation (China)**
 - **Role:** Another key Chinese manufacturer of DBS systems. Like PINS, SceneRay has provided devices for addiction studies in China.
 - **Key Partnership:** Their devices have also been utilized in clinical research at Ruijin Hospital and other Chinese research centers investigating the nucleus accumbens target for addiction.
- **Boston Scientific & Abbott (USA/Global)**
 - **Role:** While these are the other two "Big Three" DBS manufacturers, public records of specific *methamphetamine* trials currently favor Medtronic (in the US) and the Chinese manufacturers (in China). However, their devices are technically capable of the same stimulation and are sometimes used in broader substance use disorder (SUD) research.

2. Key Research Institutions (Trial Sites)

Since this is an experimental procedure, you cannot go to a standard hospital or private clinic

for it. It is only available through clinical trials at specific research hubs.

- **Ruijin Hospital (Shanghai Jiao Tong University, China)**
 - **Significance:** Widely considered the global "hub" for DBS addiction research. They were among the first to perform DBS specifically for methamphetamine addiction and have published case studies on patients who achieved remission.
 - **Target:** Nucleus Accumbens (NAc) and Anterior Limb of Internal Capsule (ALIC).
- **University of Colorado, Denver (USA)**
 - **Significance:** Currently recruiting for/conducting a notable Phase I/II trial (NCT05558358) titled "*Deep Brain Stimulation (DBS) for Methamphetamine Use Disorder.*"
 - **Details:** This is one of the few FDA-approved investigational device exemption (IDE) studies in the US specifically for meth.
- **West Virginia University (WVU) Rockefeller Neuroscience Institute (USA)**
 - **Significance:** While most famous for their *opioid* DBS trials, they are a leading center for addiction neuromodulation in the US and are broadening their scope to other substance use disorders.

Summary Table

Company/Institution	Type	Status in Meth Addiction
Medtronic	Manufacturer	Devices used in active US clinical trials.
PINS Medical	Manufacturer	Devices used in multiple Chinese clinical trials.
SceneRay	Manufacturer	Devices used in Chinese clinical trials.
Ruijin Hospital	Research Site	Leading global site for patient trials.
Univ. of Colorado	Research Site	Leading US site for specific Meth/DBS trial.

Important Medical Context

- **Target Brain Area:** Most of these companies and trials target the **Nucleus Accumbens**

(NAc), often called the brain's "reward center," to reset the reward circuitry hijacked by methamphetamine.

- **Risks:** DBS is invasive brain surgery. Risks include infection, hemorrhage, and potential personality changes.
- **Alternative:** Before considering DBS, trials typically require patients to have failed multiple rounds of standard treatments (like CBT, Matrix Model, or contingency management).