

# Nanosecond Pulse Field Ablation for Thyroid

## First Physicians Group

Nanosecond Pulse Field Ablation (nsPFA) is a non-surgical alternative to treat benign thyroid nodules with safer, faster, non-thermal energy.

### How does Nanosecond Pulse Field Ablation work?

Non-thermal nsPFA technology delivers nanosecond pulses of electrical energy to penetrate the cell membrane and disrupt cellular function at the nucleus promoting a rapid, natural process for clearing unwanted cellular tissue. Unlike thermal (heat/cold) modalities, nsPFA only affects the targeted cellular soft tissue of the nodule while preserving surrounding healthy tissue such as skin, vessels and nerves.

Using ultrasound for guidance, the physician places the tip of a needle probe into the thyroid nodule to deliver the high-speed energy pulses. This will result in shrinkage of the nodule leading to improved symptoms and cosmetic appearance. nsPFA is performed in the medical office or other outpatient setting under local anesthesia and is relatively painless. The actual procedure usually takes only a few minutes to complete, after which patients are able to go home and resume most activities.

### Thyroid conditions generally considered treatable with nsPFA:

- ▶ Benign thyroid nodules causing a feeling of fullness in the throat
- ▶ Thyroid nodules that produce excess thyroid hormone – often called autonomously functioning, or “hot”, thyroid nodules (AFTN)

Currently nsPFA is only approved to treat benign thyroid nodules, but studies are progressing to assess its efficacy for cancerous nodules.

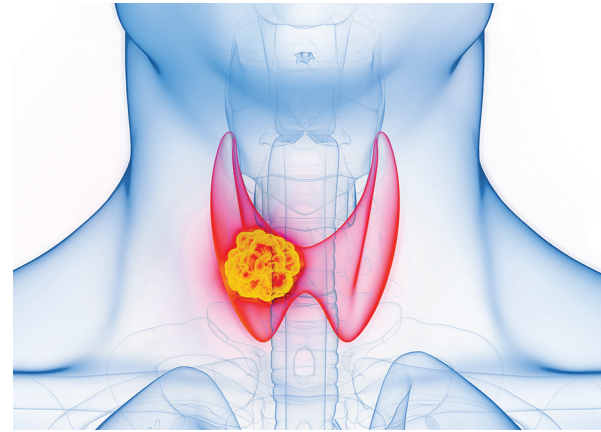
Specific testing will be performed to determine eligibility. Most patients will notice improvements soon after the treatment as the body begins to clear affected cells. Complete results are typically observed in a few weeks, once the healing process has occurred.

### Risks and Complications

**In general, nsPFA has lower risks than surgery. While uncommon, complications can include:**

- ▶ Temporary redness or swelling
- ▶ Voice changes, such as hoarseness
- ▶ Slight bleeding
- ▶ AFTN patients with “hot” thyroid nodules may have the possibility of hypothyroidism after the procedure

*Insurance reimbursement is not currently guaranteed for this procedure. Out of pocket costs should be discussed with your provider. Contact the Thyroid and Parathyroid Center for more information at (941) 262-0500 or [www.smhearnoseandthroat.com](http://www.smhearnoseandthroat.com)*



### Benefits of nsPFA

- ▶ Minimally invasive, outpatient procedure
- ▶ Avoids any scarring
- ▶ Only need local anesthesia
- ▶ Shorter recovery time and less complication risk than surgery
- ▶ No change in thyroid function or reduced function of a hyper-functioning nodule only

**First Physicians Group Thyroid and Parathyroid Center**

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**FIRST PHYSICIANS GROUP**

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