Epstein Becker & Green, P.C. 250 Park Avenue New York, NY 10177 DIRECT: (212) 351-4522 tpolin@ebglaw.com

August 2, 2005

VIA EDGAR AND FACSIMILE

Securities and Exchange Commission 100 F Street, N.E. Washington, D.C. 20549

Attn: Peggy A. Fisher, Assistant Director

AtriCure, Inc. Registration Statement on Form S-1 (File No. 333-124197)

Ladies and Gentlemen:

Re:

On behalf of AtriCure, Inc. (the "Company"), we are filing, via EDGAR, a letter from the Company requesting that the above-captioned Registration Statement be declared effective at 2:00 p.m., New York time, on the 4th of August 2005, or as soon thereafter as practicable, and a letter from the representatives of the underwriters joining in such request.

With respect to the comment set forth in the staff's letter, dated August 2, 2005, concerning Exhibit 5.1, we hereby confirm that the reference and limitation to "Delaware General Corporation Law" includes the statutory provisions and also all applicable provisions of the Delaware Constitution and reported judicial decisions interpreting these laws.

Very truly yours,

/S/ THEODORE L. POLIN Theodore L. Polin

cc: Mary Beth Breslin, Esq. (via facsimile) 202-772-9218

August 2, 2005

VIA EDGAR AND FACSIMILE

Securities and Exchange Commission 100 F Street, N.E. Washington, D.C. 20549

Attn: Peggy A. Fisher, Assistant Director

Re: AtriCure, Inc. (the "Company") Registration Statement on Form S-1 (File No. 333-124197)

Ladies and Gentlemen:

Pursuant to Rule 461 of the Rules and Regulations promulgated under the Securities Act of 1933, as amended, the undersigned hereby respectfully requests that the effective date of the above-referenced Registration Statement be accelerated to **Thursday, August 4, 2005 at 2:00 pm** (New York time), or as soon thereafter as practicable.

The Company acknowledges that:

- ð should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- δ the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any
 person under the federal securities laws of the United States.

Signature page follows

August 2, 2005 Page 2

Very truly yours,

ATRICURE, INC.

By: <u>/s/ Thomas Etergino</u> Thomas J. Etergino Vice President and Chief Financial Officer

cc: Mary Beth Breslin, Esq. (202) 772-9218