

SCHEDULE 13G

Under the Securities Exchange Act of 1934
(Amendment No. 2*)

(Name of Issuer)
ATRICURE INC

(Title of Class of Securities)
Common Stock

(CUSIP Number)
04963C209

Check the following box if a fee
is being paid with this statement.
(A fee is not required only if the
filing person: (1) has a previous
statement on file reporting beneficial
ownership of more than five percent
of the class of securities described
in Item 1; and (2) has filed no amendment
subsequent thereto reporting beneficial
ownership of five percent or less
of such class.) (See Rule 13d-7).

*The remainder of this cover page shall
be filled out for a reporting persons
initial filing on this form with respect
to the subject class of securities,
and for any subsequent amendment
containing information which would
alter the disclosures provided in
a prior cover page.

The information required in the
remainder of this cover page shall
not be deemed to be filed for the
purpose of Section 18 of the Securities
Exchange Act of 1934 (Act) or otherwise
subject to the liabilities of that section
of the Act but shall be subject to all
other provisions of the Act (however,
see the Notes).

- 1 NAME OF REPORTING PERSON S.S. OR I.R.S. IDENTIFICATION NO. OF PERSON
THOMSON HORSTMANN & BRYANT, INC.
22-3508647
- 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*
N/A
- 3 SEC USE ONLY
- 4 CITIZENSHIP OR PLACE OF ORGANIZATION
A DELAWARE CORPORATION
NORWALK, CT 06851
- 5 SOLE VOTING POWER
0
- 6 SHARED VOTING POWER
449450
- 7 SOLE DISPOSITIVE POWER
885940
- 8 SHARED DISPOSITIVE POWER
NONE
- 9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
885940
- 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES*
N/A

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9
3.19%

12 TYPE OF REPORTING PERSON *
IA

ITEM 1.
(A) ATRICURE INC
(B) 6217 CENTRE PARK DRIVEWEST CHESTER OH 45069

ITEM 2.
(A) THOMSON HORSTMANN & BRYANT, INC.
(B) 501 MERRITT 7, NORWALK, CT 06851
(C) A DELAWARE CORPORATION
(D) COMMON
(E) 872391107

ITEM 3.
(E) INVESTMENT ADVISER REGISTERED UNDER SECTION
203 OF THE INVESTMENT ADVISERS ACT OF 1940

ITEM 4.
(A) 885940
(B) 3.19
(C) (I) 0
(II) 449450
(III) 885940
(IV) NONE

ITEM 5. N/A

ITEM 6. N/A

ITEM 7. N/A

ITEM 8. N/A

ITEM 9. N/A

ITEM 10. CERTIFICATION

By signing below I certify that,
to the best of my knowledge and belief,
the securities referred to above were
acquired in the ordinary course of
business and were not acquired for the
purpose of and do not have the effect of
changing or influencing the control of the
issuer of such securities and were not
acquired in connection with or as a
participant in any transaction having
such purposes or effect.

SIGNATURE

After reasonable inquiry and to the
best of my knowledge and belief, I
certify that the information set
forth in this statement is true,
complete and correct.

James Kennedy
Date: 1/21/15