

PROSPECTUS SUPPLEMENT NO.2 DATED SEPTEMBER 29, 2011

(To Prospectus dated July 29, 2011, as supplemented by
Prospectus Supplement dated September 13, 2011)

7,639,419 Shares



MicroVision, Inc.

Common Stock

This Prospectus Supplement No. 2 supplements the prospectus dated July 29, 2011, as supplemented by the prospectus supplement dated September 13, 2011. This prospectus supplement should be read in conjunction with the prospectus and previous prospectus supplement, and is qualified in its entirety by reference to the prospectus and previous prospectus supplement, except to the extent that the information presented herein supersedes the information contained in the prospectus or previous prospectus supplement. This Prospectus Supplement No. 2 is not complete without, and may not be delivered or utilized, except in connection with the accompanying prospectus. Unless the context otherwise indicates, references in this prospectus supplement to the "accompanying prospectus" refer to the prospectus dated July 29, 2011, as supplemented by the prospectus supplement dated September 13, 2011.

Pursuant to this prospectus supplement and the accompanying prospectus, we are offering 7,639,419 shares of our common stock to Azimuth Opportunity Ltd., or Azimuth, pursuant to a Common Stock Purchase Agreement between us and Azimuth dated September 13, 2011, which we refer to as the Purchase Agreement, at a price of \$0.6545 per share. The total purchase price for the shares is \$5,000,000. We will receive net proceeds from the sale of these shares of approximately \$4,930,000 after deducting our estimated offering expenses of approximately \$70,000, including a placement agent fee of \$50,000 to be paid to Reedland Capital Partners, an Institutional Division of Financial West Group, Member FINRA/SIPC, in connection with this offering.

This prospectus supplement and the accompanying prospectus also cover the sale of these shares by Azimuth to the public. Azimuth is an "underwriter" within the meaning of Section 2(a)(11) of the Securities Act of 1933, as amended, or the Securities Act, and any profits on the sales of shares of our common stock by Azimuth and any discounts, commissions or concessions received by Azimuth may be deemed to be underwriting discounts and commissions under the Securities Act.

Our common stock is listed on The NASDAQ Global Market under the symbol "MVIS." The last reported sale price of our common stock on The NASDAQ Global Market on September 28, 2011 was \$0.70 per share.

Investing in our common stock involves a high degree of risk. Please see the sections entitled "Risk Factors" beginning on page S-2 of the accompanying prospectus and "Part II — Item 1A Risk Factors" in our Quarterly Report on Form 10-Q for the quarter ended June 30, 2011.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities, or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

This prospectus supplement and the accompanying prospectus are part of a registration statement (File No. 333-175419) that we filed with the Securities and Exchange Commission utilizing a “shelf” registration process. Under this “shelf” registration process, we may sell from time to time in one or more offerings up to \$35,000,000 in aggregate offered amount of our securities described in the accompanying prospectus.

You should rely only on the information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus. We have not authorized anyone to provide you with different or additional information. If anyone provides you with different or additional information, you should not rely on it. We are not making an offer of these securities under any circumstance or in any jurisdiction where the offer is not permitted or unlawful. You should assume that the information contained in this prospectus supplement and the accompanying prospectus is accurate only as of their respective dates, and that any information in documents that we have incorporated by reference is accurate only as of the date of the document incorporated by reference.

Plan of Distribution. Pursuant to the Purchase Agreement, on September 28, 2011 we presented Azimuth with a draw-down notice granting Azimuth the option to purchase up to an aggregate of \$5,000,000 of shares of our common stock, subject to the Trading Market Limit. No fixed amount was requested by the draw-down notice. On September 30, 2011, we expect to settle with Azimuth on the purchase of 7,639,419 shares of our common stock under the terms of the draw-down notice and the Purchase Agreement. As of the date of this prospectus supplement, after giving effect to the sale of the common shares offered by us in this offering, we will have sold \$5,000,000 of securities under the registration statement, leaving \$30,000,000 of securities that we may offer and sell in the future under the registration statement. Additional information is set forth under the caption “Plan of Distribution” in the accompanying prospectus.