
UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 8-K

CURRENT REPORT

PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of report (date of earliest event reported):

June 15, 2005

Aastrom Biosciences, Inc.

(Exact name of registrant as specified in its charter)

Michigan

(State or other jurisdiction of
incorporation)

0-22025

(Commission File No.)

94-3096597

(I.R.S. Employer Identification
No.)

24 Frank Lloyd Wright Drive

P.O. Box 376

Ann Arbor, Michigan 48106

(Address of principal executive offices)

Registrant's telephone number, including area code:

(734) 930-5555

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
 - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
 - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR .14d-2(b))
 - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR .13e-4(c))
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Item 7.01 Regulation FD Disclosure.

Attached hereto as Exhibit 99.1, which is incorporated herein by reference, is a copy of certain slides used by the Company in making a conference presentation and that are expected to be used in subsequent presentations to interested parties, including analysts and shareholders. This information is not "filed" pursuant to the Securities Exchange Act and is not incorporated by reference into any Securities Act registration statements. Additionally, the submission of this report on Form 8-K is not an admission as to the materiality of any information in this report that is required to be disclosed solely by Regulation FD. Any information in this report supercedes inconsistent or outdated information contained in earlier Regulation FD disclosures.

Item 9.01 Financial Statements and Exhibits.

(c) Exhibits.

<u>Exhibit No.</u>	<u>Description</u>
99.1	Slides used in presentation

2

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: June 15, 2005

AASTROM BIOSCIENCES, INC.

By: /s/ Alan M. Wright
Alan M. Wright
Senior Vice President, Administrative and
Financial Operations, CFO



*Proprietary Cell Products for
Tissue Regeneration*

Investor Presentation
June, 2005

(Nasdaq:ASTM)

SAFE HARBOR

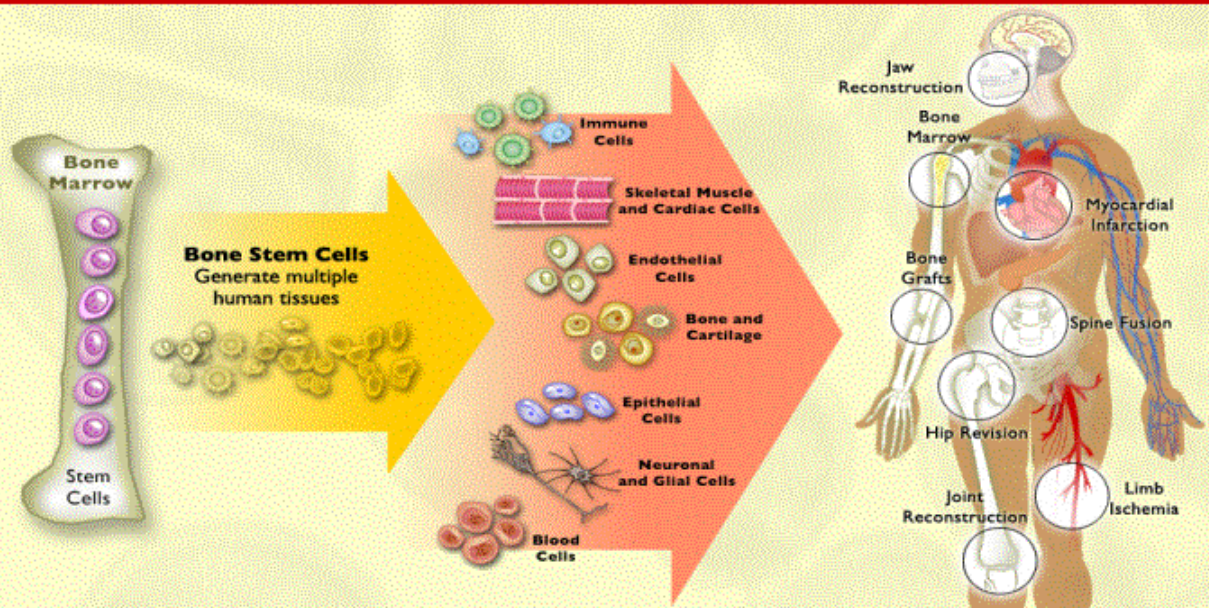
- This presentation contains forward-looking statements, including, without limitation, statements concerning product-development objectives and anticipated timing, clinical trial timing and expected results, potential market opportunities and revenue models, market development plans, anticipated key milestones and potential advantages and applications of Tissue Repair Cells (TRCs), which involve certain risks and uncertainties. Actual results may differ significantly from the expectations contained in the forward-looking statements.
 - Among the factors that may result in differences are the results obtained from clinical trials and development activities, regulatory approval requirements, competitive conditions and availability of resources.
 - These and other significant factors are discussed in greater detail in Aastrom's Annual Report on Form 10-K and other filings with the Securities and Exchange Commission.
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Summary

- Emerging as a leading tissue regeneration company
- Proprietary bone marrow stem cell products: *Tissue Repair Cells*
- Business model based on clinical experience and ability to apply TRCs to multiple markets
- In clinic with multiple Phase II-level trials for bone grafting
- Additional Phase II-level trial for diabetic limb ischemia expected to begin in 2005
- Multiple clinical milestones expected over next 18 months
- Good financial position

Capturing the Therapeutic Potential of Bone Marrow Stem Cells

Regenerate tissues with stem cells grown from bone marrow collected from the patient...



What's Unique About Aastrom

Proprietary adult *stem cells* and industry-unique *manufacturing capability*...

Proprietary
Tissue Repair Cells



AastromReplicell System

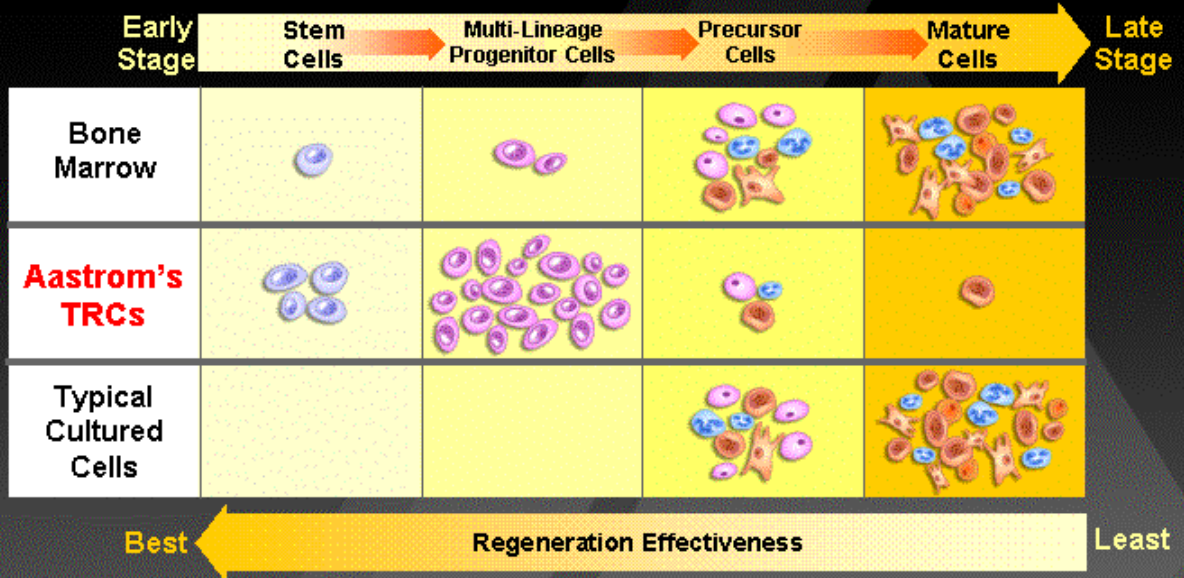


- Bone marrow-derived adult stem & progenitor cells (non-embryonic)
- Bone, vascular, blood, cartilage and adipose forming capability
- Produced *ex vivo* with patented single-pass perfusion technology
- Proven safety and tissue generation in > 180 patients
- Cell production automation with GMP compliance
- 12-day fixed production cycle
- Scalable
- Point of care or centralized manufacturing capability

... the *Transformation of Technology into Products*

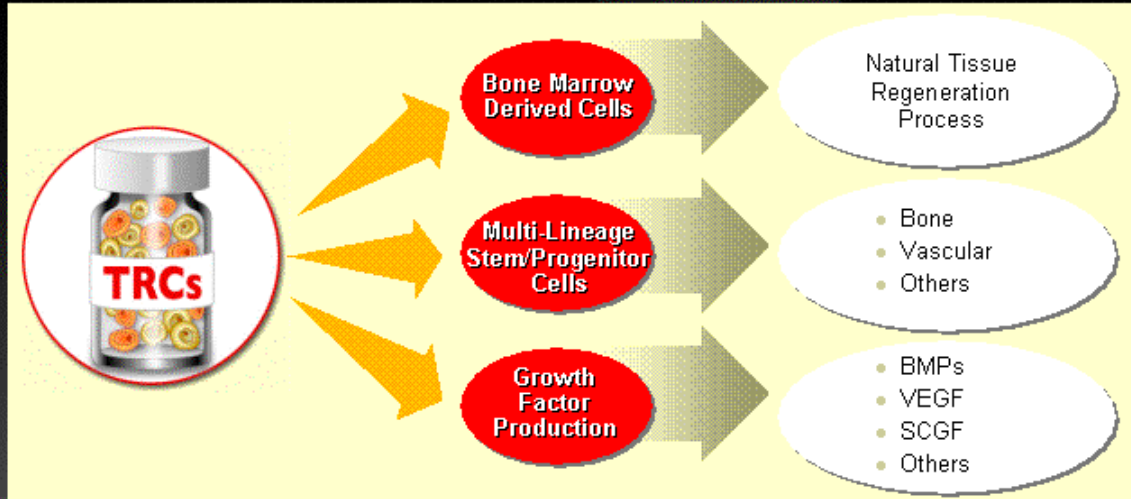
Tissue Repair Cells

Maximizing Regenerative Capability



Aastrom Tissue Repair Cell Product

New Capability in Tissue Regeneration



Tissue Repair Cells: *How The Process Works*

Small aspirate
collected from patient

Cells go to
production lab

TRCs produced in
AastromReplicell System

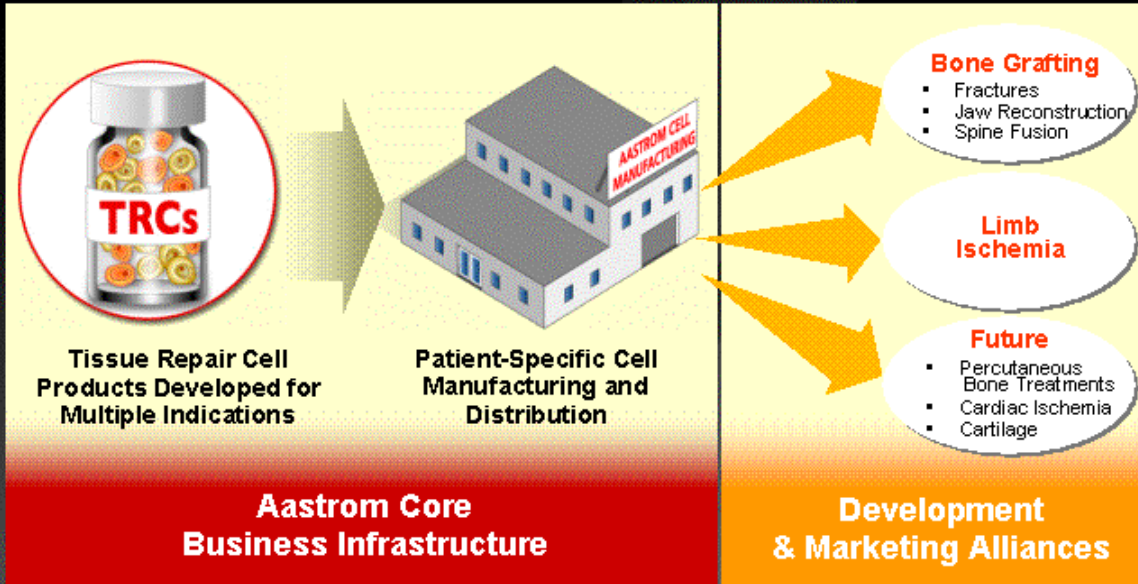
TRCs used to generate
healthy tissues



**TRC products are designed
to generate revenue
just like pharmaceuticals**

Aastrom's Business Model

Transforming Cells into Products



Development Pipeline

	Research	Preclinical	Clinical	Market	Comments
Bone Grafting					
Long bone fractures					
U.S.			Phase III		Trial enrolling at 4 sites
Europe			Proof of Concept		Positive results reported
Jaw reconstruction - Europe <small>(Silastic III for dental implants)</small>			Proof of Concept		Results expected in 3Q CY2005
Spine fusions					FDA submission in 2-3Q CY2005
Vascular Tissue					
Peripheral limb ischemia			Pending		Agreement with HDZ – Germany
Cardiac ischemia					Animal model underway
Cartilage					
Joint reconstruction					Cartilage from TRCs established

Aastrom Tissue Repair Cells

Active Lead Product Indications

Product	Applications	Applicable Market Size (Patients) *	Clinical Status
Bone Grafting			
• Fracture	Long bone fractures	120,000	U.S./EU: Active
• Jaw	Sinus lift	205,000	EU: Active
• Spine	Spine fusions	330,000	Preclinical
Vascular Tissue			
• Ischemia	Diabetic limb ischemia	560,000	Pending

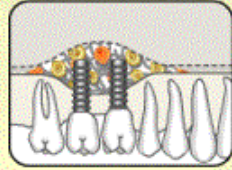
* Sources: Datamonitor 2002; Millennium Research Group CY2009 projections; U.S. Census 2000; United Nations 2002 World Population Report; Weitz JI, Byrne J, Clagett P, et al. Diagnosis and Treatment of Chronic Arterial Insufficiency of the Lower Extremities: A Critical Review. *Circulation* 1996; 94: 3026-49. (U.S., Europe and Japan)



Potential for TRCs in Bone Grafting



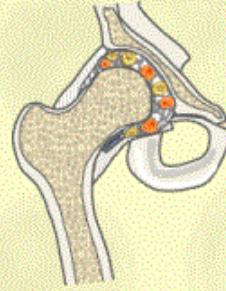
Bone Fracture



Sinus Lift Indication



Spine Fusion Indication



Hip Revision Indication



Bone Tumor/Cyst Indication

Bone Graft Product Comparison

Conceptual Model for Severe Indications

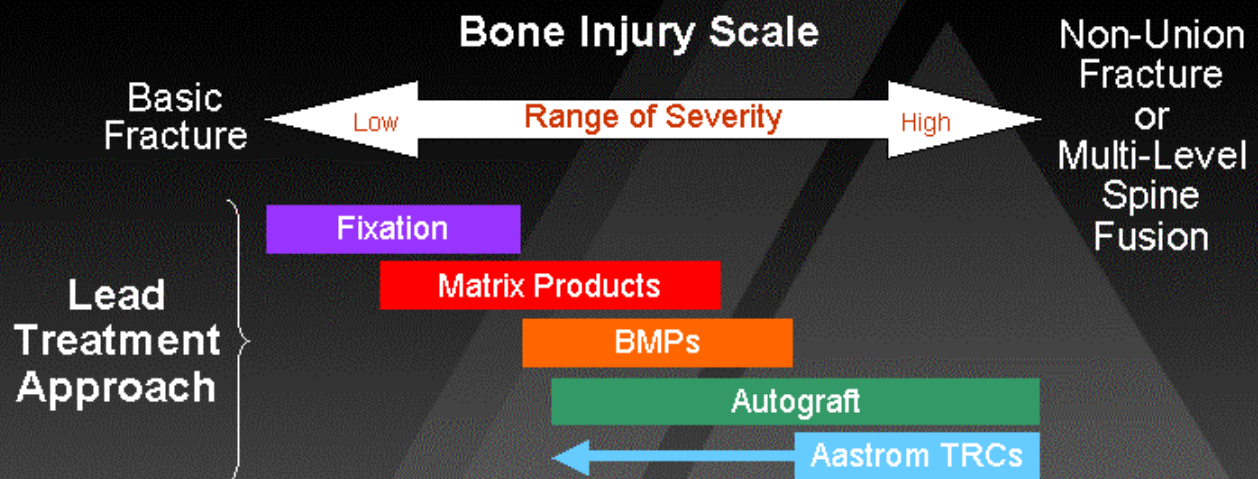
	Therapy	Effectiveness	Morbidity	Cells
Alternatives	Autograft (Gold Standard)	+++	high	++
	Synthetic Matrix	+	low to high	no
	Allograft/DBM Matrix	+ (variable)	low to high	no
	BMP	++	n/a	no
	Aastrom TRCs (+ Matrix)	+++ (+)	low	+++

DBM = Demineralized Bone Matrix
BMP = Bone Morphogenic Proteins



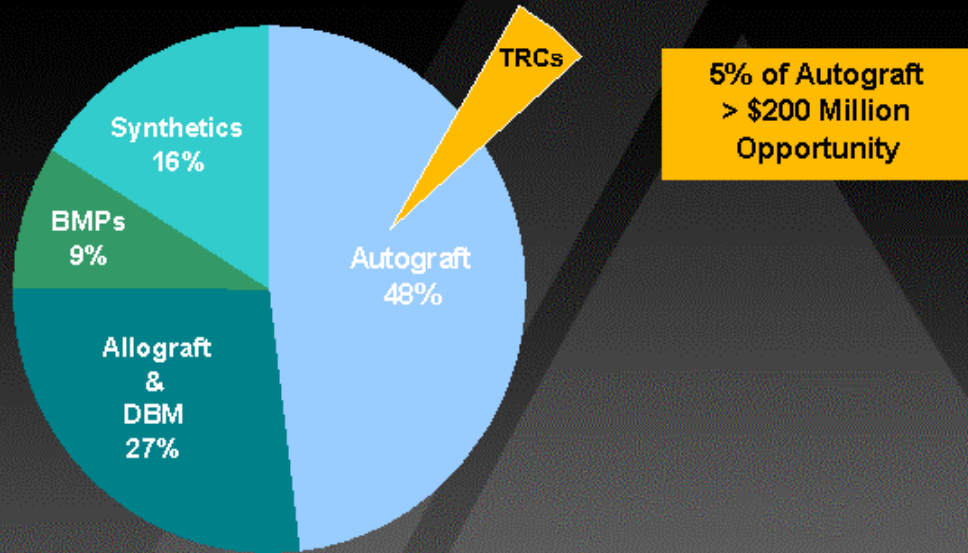
Bone Graft Market

Conceptual Product Use Model



Bone Graft Market Opportunity

Global Market: 2 Million Bone Grafts Annually

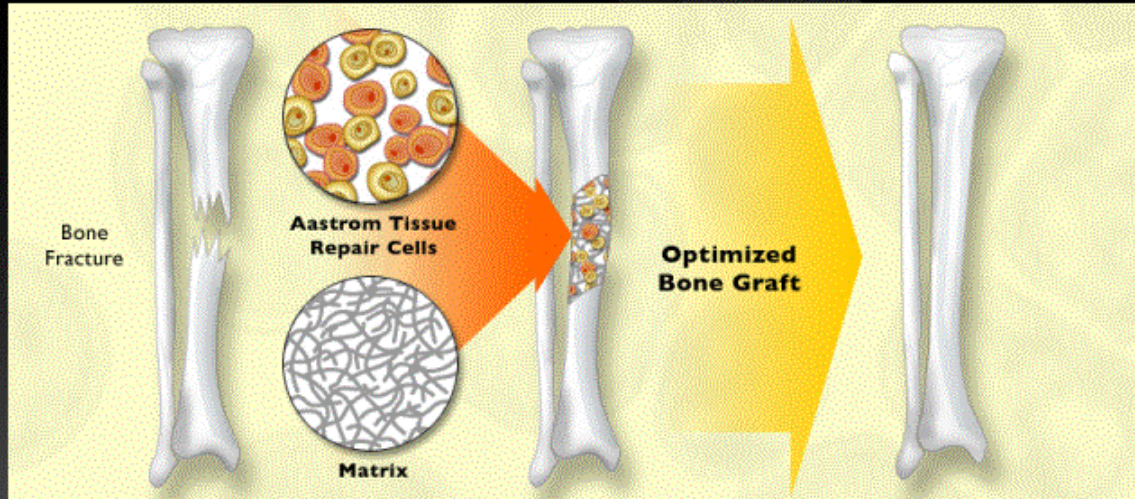


Source: Millennium Research Group CY2009 projections (U.S., Europe and Japan)
BMP = Bone Morphogenic Proteins
DBM = Demineralized Bone Matrix



TRCs for Bone Grafting

Bone Fracture Indications



Bone Graft Clinical Plan

Bone Fracture Indications

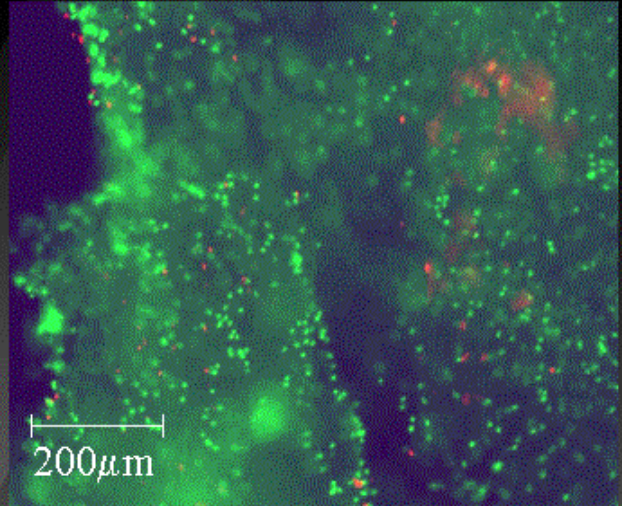
- EU
 - Lead proof of concept study initiated in Spain in 2Q CY2004
 - First phase (6 treatments) completed; positive trial results reported May 2005
 - Process underway to expand trial to larger size and multiple centers
- United States
 - Phase I/II multi-center trial; IND approved by FDA
 - Safety milestone achieved, allowed to expand to fresh as well as long-term non-union fractures
 - Four sites currently active
 - 20 patient target
 - Targeted accrual/treatment completion in 4Q CY2005

TRCs and Matrix

Combining TRCs and Matrix



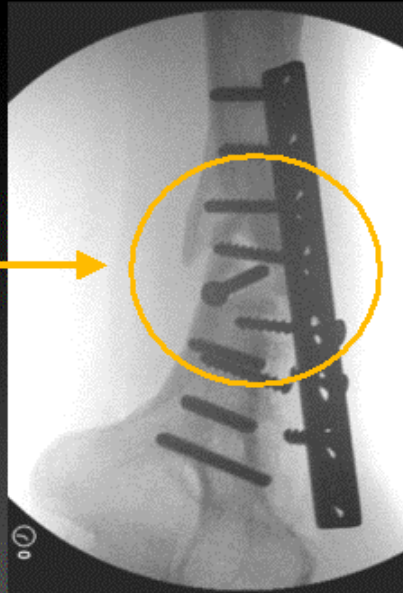
Micrograph of TRCs in Matrix



Non-Union Fracture Trial

Candidate Patient X-Rays *

Point
of
Fracture

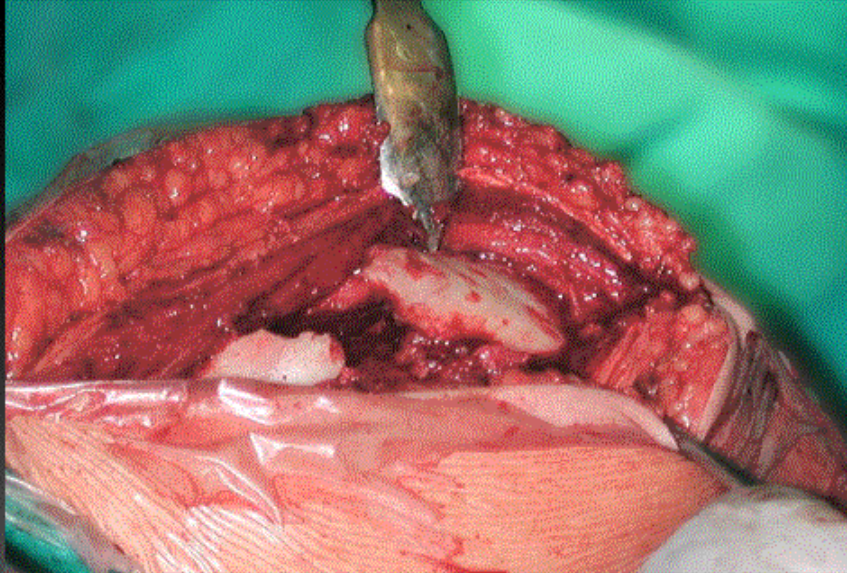


* Clinical Situation: Non-union fracture of humerus which failed fixation and autograft (> 8 months)



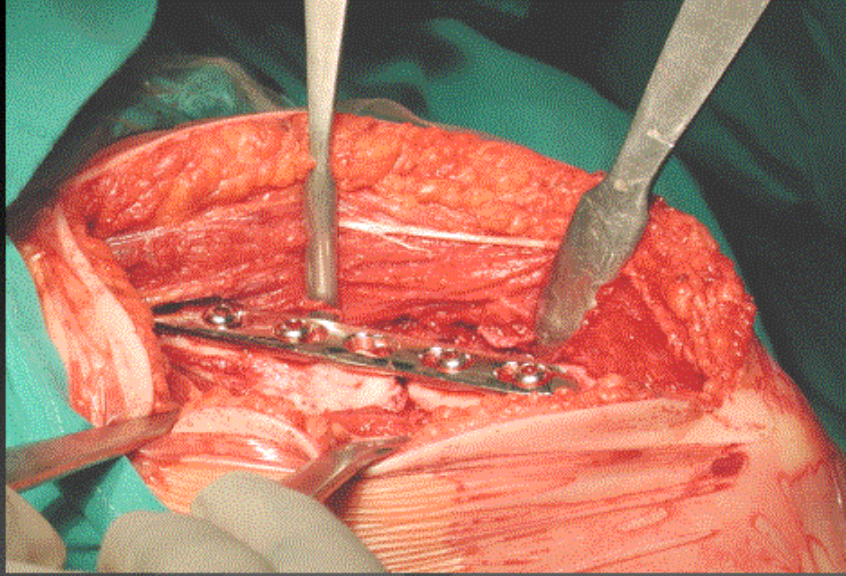
Non-Union Fracture Trial

Fracture Site with Previous Fixation Removed



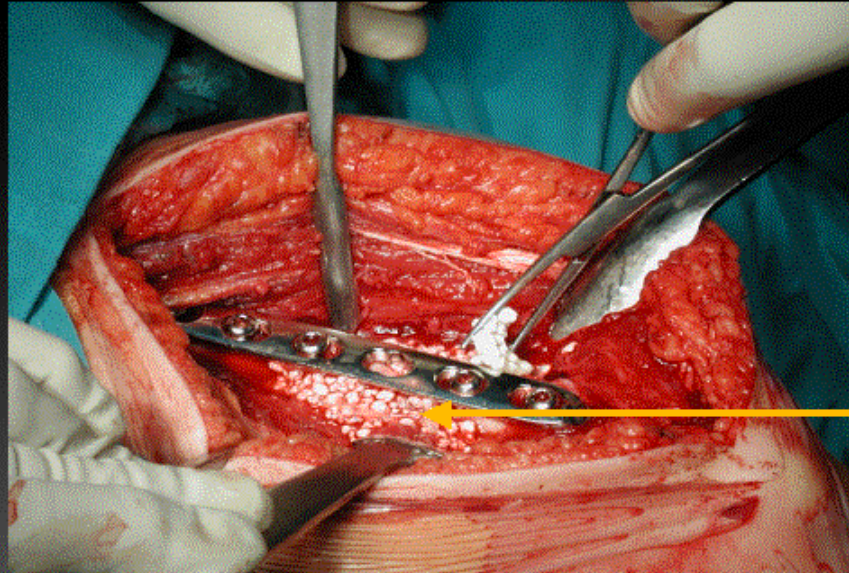
Non-Union Fracture Trial

Fracture Site with New Fixation Applied



Non-Union Fracture Trial

TRCs and Matrix Applied at Fracture Site



TRCs
and
Matrix

Non-Union Fracture Trial

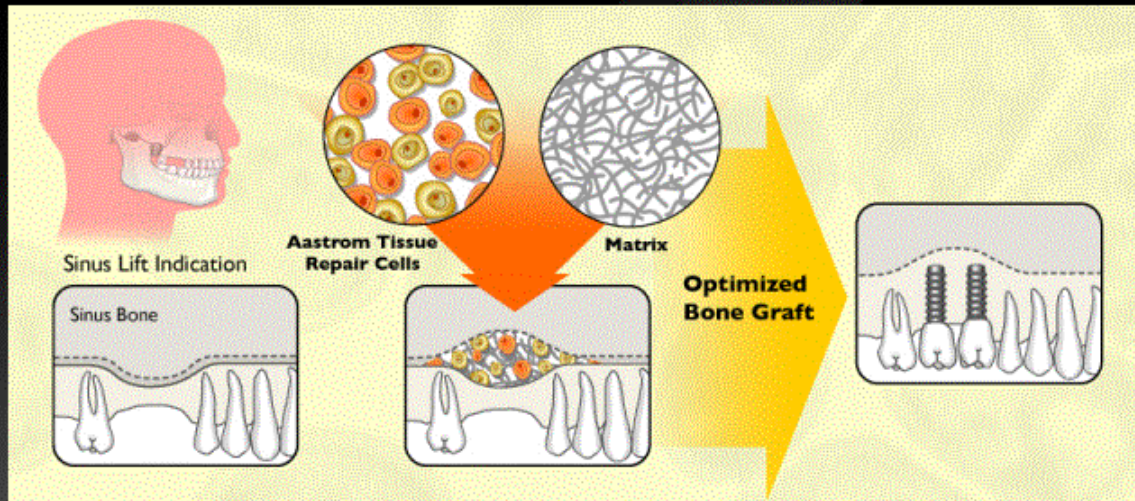
Patient Recovery (5 Months)

Fracture
Site



TRCs for Bone Grafting

Jaw Reconstruction Indication



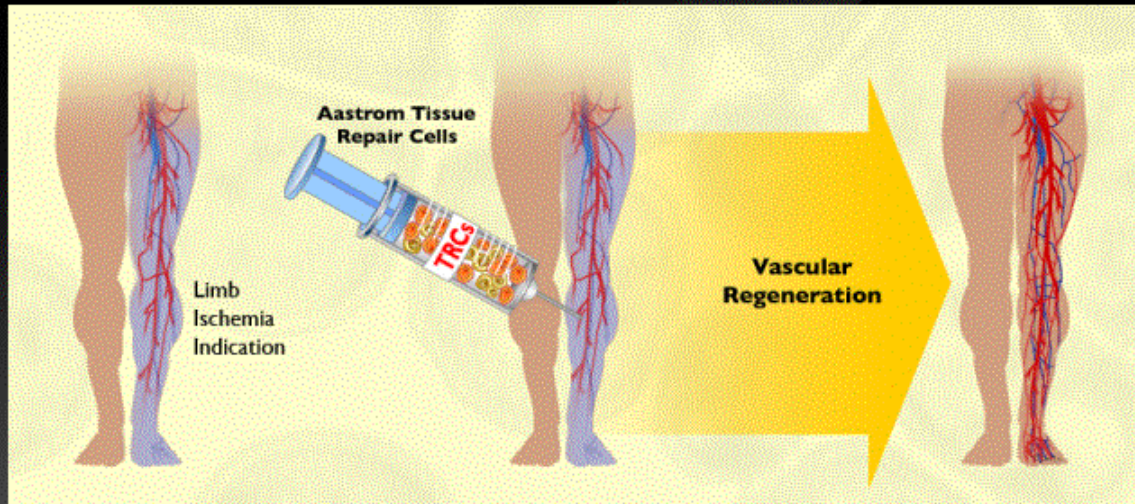
Bone Graft Clinical Plan

Jaw Reconstruction Indication

- EU
 - Lead trial for dental implant (sinus lift) initiated in Spain
 - 5 patient study; enrollment complete
 - Bone formation measured by biopsy/histology and compared to standard bone graft approach in same patient
 - Results expected in 3Q CY2005
- United States
 - Hold until EU trial data available

TRCs for Vascular Tissue

Limb Ischemia Indication



Limb Ischemia (Veins and Arteries)

Rationale for TRC Development

- Large market opportunity, with limited therapeutic competition
 - Diabetic and Buerger's disease patients
 - Targeted 2 million patients in need of surgery for severe limb ischemia
 - Reimbursement levels are high for interventional treatments
- Published clinical results suggest effectiveness of large volume bone marrow for limb ischemia
 - Similar reports for cardiac ischemia
- TRCs ready to go to trial
 - TRC's vascular lineage capability demonstrated *in vitro*
 - Leverage existing infrastructure established for bone grafting
 - TRCs shown as effective substitute for large volume bone marrow in BMT indication (Aastrom trials)

Source: Millennium Research Group CY2009 projections (U.S., Europe and Japan)
BMT = Bone Marrow Transplantation



Limb Ischemia

Effect of Large Volume Bone Marrow

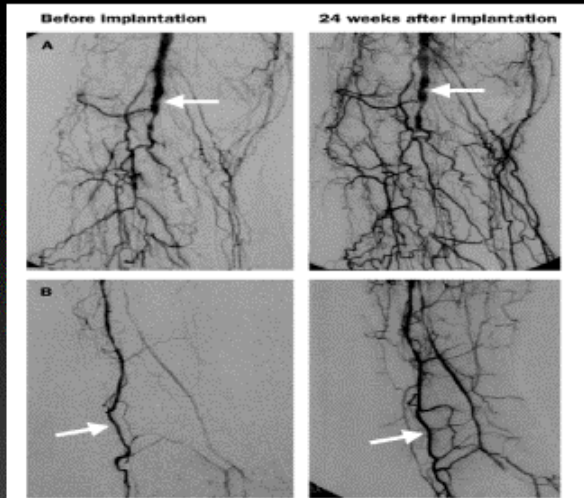


Figure 5: **Angiographic analysis of collateral vessel formation in patients in group A**

Collateral branches were strikingly increased at (A) knee and upper tibia and (B) lower tibia, ankle, and foot before and 24 weeks after marrow implantation. Contrast densities in suprafemoral, posterior tibial, and dorsal pedal arteries (arrows) are similar before and after implantation.

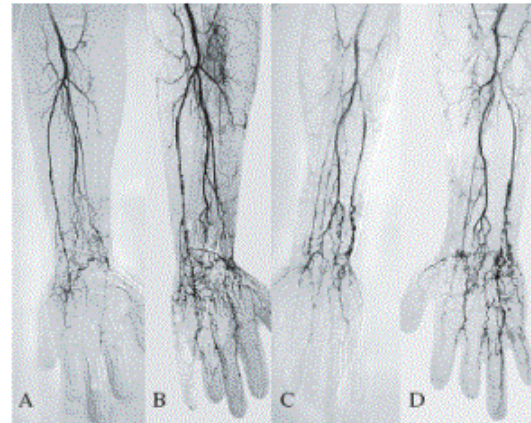


Fig. 2. Arteriography of the right hand (A, B) and the left hand (C, D). Before bone marrow transplantation (A, C). Comparison of arteriography performed with that performed on day 120 revealed the formation of new collateral vessels and the dilation of pre-existing vessels (B, D).

Sources: [Lancet 360: 427-435, 2002](#) (left panel)
[Eur J. Vasc Endovasc Surg 00, 1-3, 2002](#) (right panel)

Vascular Tissue Clinical Plan

Limb Ischemia Indication

- EU
 - Clinical trial agreement with HDZ in Bad Oeynhausen, Germany
 - Cell manufacturing license process initiated
 - Patient accrual expected to begin mid-CY2005
- United States
 - Phase I NIH grant supported circulation ischemia research
 - Vascular forming capability of TRCs demonstrated
 - Pursuing grants for further research development

Partnering

- 2003 alliance with



- Largest provider of allograft tissue matrix (>\$250 million revenue)
 - Companies both contribute to development and clinical expenses for products that combine TRCs and MTF matrix
 - Companies sell their own products and coordinate marketing
- Targeting other relationship(s) for synthetic matrix
 - Targeting other marketing partners for each indication
 - Fracture; Jaw; Spine; Vascular

Aastrom Balance Sheet Data

(March 31, 2005 *)

- Cash and Investments \$ 35,400,000
- Total Assets \$ 37,000,000
- Shareholders' Equity \$ 36,200,000
- Average Cash Usage Per Month \$ 1,000,000

* Per Aastrom Biosciences, Inc. Form 10-Q for quarter ended March 31, 2005





*Proprietary Cell Products for
Tissue Regeneration*

Investor Presentation
June, 2005

(Nasdaq:ASTM)