Filed Pursuant to Rule 433 Issuer Free Writing Prospectus dated September 12, 2012 Relating to Preliminary Prospectus dated August 30, 2012 Registration No. 333-179500

ATOSSA GENETICS, INC. FREE WRITING PROSPECTUS

September 12, 2012

This free writing prospectus relates only to the offering of Atossa Genetics, Inc. common stock described below and should be read together with the preliminary prospectus dated August 30, 2012 relating to this offering (the "<u>Preliminary Prospectus</u>"), included in Amendment No. 8 to the Registration Statement on Form S-1 (File No. 333-179500) relating to these securities. The most recent Registration Statement can be accessed through the following link: http://www.sec.gov/Archives/edgar/data/1488039/000114420412049048/v322640 s1a.htm.

The following information supplements and updates the information contained in the Preliminary Prospectus.

Recent Developments

Atossa Genetics Inc. ("Atossa") announced on September 12, 2012 that it has entered into an agreement with MultiPlan, Inc., a leading provider of healthcare cost management solutions, for diagnostic laboratory testing involving Atossa's tests. Approximately 900,000 healthcare providers participate in MultiPlan's provider networks and an estimated 57 million consumers have access to one or more of these networks. The agreement allows for Atossa to participate in the MultiPlan, PHCS and PHCS Savility Networks.

Atossa's agreement with MultiPlan will give MultiPlan's participating providers and their patients access to Atossa's tests, including the ForeCYTE and ArgusCYTE Breast Health Tests. Atossa anticipates that its agreement with MultiPlan will help ensure that more doctors and their patients have access to the ForeCYTE and ArgusCYTE Breast Health Tests and that patients will receive insurance reimbursement for the laboratory costs associated with these tests.

Financial Update

Atossa reported unaudited balance sheet data as of August 31, 2012, as set forth below.

ATOSSA GENETICS INC. (A DEVELOPMENT STAGE COMPANY) CONSOLIDATED BALANCE SHEETS

	August 31, 2012 (Unaudited)		December 31, 2011 (Audited)	
<u>Assets</u>				
Current Assets				
Cash and cash equivalents	\$		\$	1,910,821
Restricted cash		250,000		1,000,000
Accounts receivable		230,758		1,224
Due from related party		1,100		-
Prepaid expense		203,601		31,184
Rental deposits		2,200		2,200
Total Current Assets		695,293		2,945,429
Fixed Assets				
Furniture and Equipment, net		72,582		80,467
Total Fixed Assets		72,582		80,467
Other Assets				
Security deposit		35,746		5,157
Intangible assets, net		32,430		40,841
Total Other Assets		68,176	_	45,998
Total Assets	\$	836,051	\$	3,071,894
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<u>Liabilities and Stockholders' Equity</u>				
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Current Liabilities				
Line of Credit	\$	250,000	\$	1,000,000
Accounts payable	Ψ	701,398	Ψ	64,766
Accrued expenses		359,339		442,329
Note payable - related party		58,900		5,078
Total Current Liabilities		1,369,637		1,512,173
Total Carrent Elabilities		1,505,057		1,512,175
Stockholders' Equity				
Preferred stock - \$.001 par value; 10,000,000 shares authorized,				
0 shares issued and outstanding		_		_
Common stock - \$.001 par value; 75,000,000 shares authorized,		_		_
11,256,867 shares issued and outstanding		11,257		11,257
Additional paid-in capital		6,316,182		6,200,520
Accumulated deficit		(6,861,025)		(4,652,056)
Total Stockholders' Equity (Deficit)				
Total Stockholders Equity (Deficit)		(533,586)		1,559,721
Total Liabilities and Stockholders' Equity	\$	836,051	\$	3,071,894

The issuer has filed a registration statement (including a prospectus) with the SEC for the offering to which this communication relates. Before you invest, you should read the prospectus in that registration statement and other documents the issuer has filed with the SEC for more complete information about the issuer and this offering. You may get these documents for free by visiting EDGAR on the SEC Web site at www.sec.gov. Alternatively, the issuer, any underwriter or any dealer participating in the offering will arrange to send you the prospectus if you request it by calling (561) 208-2939.

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