

October 23, 2006

Mr. Jim B. Rosenberg
Senior Assistant Chief Accountant
United States Securities and Exchange Commission
100 F Street, NE
Washington, D.C. 20549

Re: GTX, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2005
File No. 000-50549

Dear Mr. Rosenberg:

We received verbal comments from Amy Bruckner, Staff Accountant, on September 6, 2006, in response to our letter to you dated August 8, 2006. Please find below GTX, Inc.'s response to Ms. Bruckner's comments.

In future filings beginning with its 10-Q for the quarter ended September 30, 2006, the Company will expand its Critical Accounting Policies and Significant Judgments and Estimates discussion in Management's Discussion and Analysis of Financial Condition and Results of Operations as follows to more specifically address what information is obtained from external sources and how it is used to estimate the Company's accrual for product returns as well as to enhance the Company's disclosure about historical product returns:

Revenue Recognition

We recognize net product sales revenue from the sale of FARESTON® less deductions for estimated sales discounts and sales returns. We recognize revenue from product sales when the goods are shipped and title and risk of loss pass to the customer and the other criteria of Staff Accounting Bulletin ("SAB") No.101, "Revenue Recognition in Financial Statements" as amended by SAB No. 104 (together, "SAB 104") and Statements of Financial Accounting Standards No. 48, "Revenue Recognition When Right of Return Exists," are satisfied. We account for rebates to certain governmental agencies as a reduction of revenue. We allow customers to return product within a specified time period prior to and subsequent to the product's labeled expiration date. As a result, we estimate an accrual for product returns based on factors which include historical product returns and estimated product in the distribution channel which is expected to exceed its expiration date. We retained substantially the same wholesale customers of, and the distribution channel that was used by another pharmaceutical company that distributed FARESTON® for six years prior to our obtaining the rights to market FARESTON® in January 2005. We also obtained

historical product return trend information that we continue to update with our own product return data. We estimate the amount of product in the distribution channel which is expected to exceed its expiration date and be returned by the customer by receiving information from our three largest wholesale customers about the levels of FARESTON® inventory held by these customers. These three largest customers accounted for 94% of the total sales of FARESTON® for the nine month period ended September 30, 2006. Based on this information, which we have not independently verified, we estimate the number of months of product on hand. At September 30, 2006 and December 31, 2005, our accrual for product returns was \$162,000 and \$274,000, respectively. If actual future results are different than our estimates, we may need to adjust our estimated accrual for product returns, which could have a material effect on earnings in the period of the adjustment.

The Company provides sales rebates to the Department of Veteran Affairs and to State Medicaid rebate programs. Total year to date rebate expense through September 30, 2006 was approximately \$25,000. As rebate expense is immaterial to the Company's financial condition and results of operations, the Company did not disclose more detailed information about its rebate program in its discussion of Critical Accounting Policies and Significant Judgments and Estimates in Management's Discussion and Analysis of Financial Condition and Result of Operations in Form 10-Q for the quarterly period ended June 30, 2006. In future periods as the Company's rebate expense becomes material to its financial condition or results of operations, the Company will provide more detailed disclosure about its rebate program in its Management's Discussion and Analysis of Financial Condition and Result of Operations in future SEC filings.

In our response letter to you dated August 8, 2006, we provided a roll-forward of the Company's FARESTON® product return accrual for the year ended December 31, 2005 and for the quarter ended March 31, 2006. The Company did not include the roll-forward of the product return accrual in its discussion of Critical Accounting Policies and Significant Judgments and Estimates in Management's Discussion and Analysis of Financial Condition and Result of Operations in Form 10-Q for the quarterly period ended June 30, 2006, as estimated product returns and actual product returns are not material as compared to the Company's financial condition or results of operations. As of September 30, 2006, the Company's year to date net loss was \$30.8 million, its year to date change in accrual for estimated product returns was \$29,000 and year to date actual product returns were \$142,000. At such time that actual or estimated product returns in the future are material as compared to the Company's financial condition or results of operations, the Company commits that it will include a roll-forward of its product return accrual in Management's Discussion and Analysis of Financial Conditions and Results of Operations in future SEC filings.

United States Securities and Exchange Commission
October 23, 2006

We hope that the responses provided above will be sufficient to address Ms. Bruckner's comments. Please let us know if you require any additional information.

Best Regards,

/s/ Mark E. Mosteller

Mark E. Mosteller
Vice President and Chief Financial Officer