UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

DIVISION OF
CORPORATION FINANCE

February 20, 2014

Via E-mail
Eric D. Major
Chief Executive Officer
K2M Group Holdings, Inc.
751 Miller Drive SE
Leesburg, VA 20175

Re: K2M Group Holdings, Inc.
Draft Registration Statement on Form S-1
Submitted January 24, 2014
CIK No. 1499807

Dear Mr. Major:

We have reviewed your draft registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Overview, page 1

1. Please revise your disclosure on pages 1 and 2 to describe briefly the types of products that you sell and identify your customers.

2. Please provide us with independent objective support for all claims of improved clinical outcomes and benefits, and for the performance claims made in the first, second and sixth bullet points on page 4. Provide similar support for the market data in the section captioned "Market Opportunity" on pages 91-92. Please also tell us whether you commissioned any of this data.

3. Where you compare your products, technologies and procedures to others, please revise to specify the product, technology or procedure to which you are making that comparison. Also, where you make claims in your Summary and elsewhere regarding the efficacy of your products, please revise to state, as indicated on page 17, that you do

not have available long-term clinical data regarding the quality, safety and effectiveness of your marketed products.

4. Where you cite the number of product lines you have commercialized and introduced, such as in the second and third paragraphs of this section and in the fourth bullet point under "Our Competitive Strengths" on page 3, please also disclose that a significant portion of your sales in each period for which financial statements are presented is derived from the MESA line of products or products that incorporate MESA, as indicated on page 19.

5. Please provide us with the revenue figures to support the cited compound annual growth rate figure and explain to us why you have chosen this period rather than a more recent one.

Our Competitive Strengths, page 3

6. We note your disclosure that you have "developed relationships" with independent sales agencies and distributor partnerships. Please revise to clarify the nature of these relationships and state whether you have entered into any agreements with these entities.

Risks Related to Our Business and this Offering, page 4

7. We refer to the risk factor disclosure at the bottom of page 49. Please revise the final bullet point under the heading to quantify the ownership stake following the offering and your utilization of the "controlled company" exemptions from corporate governance requirements.

Implications of Being an Emerging Growth Company, page 5

8. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications. Similarly, please supplementally provide us with any research reports about you that are published or distributed in reliance upon Section 2(a)(3) of the Securities Act of 1933 added by Section 105(a) of the Jumpstart Our Business Startups Act by any broker or dealer that is participating or will participate in your offering.

9. Please revise here and elsewhere in your document where you describe the implications of being an emerging growth company to state that you have irrevocably elected to delay the adoption of new or revised accounting standards until those standards would otherwise apply to private companies. Also add appropriate risk factor disclosure regarding this election. In this regard, we note your disclosure in the first full sentence on page 83.

Summary Historical Consolidated Financial Data, page 9

10. We note here and throughout the filing that you have presented pro forma adjustments relating to the automatic conversion of all outstanding shares of your Series A and B preferred stock into shares of common stock. We further note from page F-22 that such conversion occurs only upon the closing of a firm commitment underwritten public offering resulting in proceeds to the company and/or the selling shareholders in excess of $100 million and the listing of the common stock on either the New York Stock Exchange, NASDAQ Global Market, or the NASDAQ Global Select Market. Please explain to us why you believe these pro forma adjustments are factually supportable by confirming to us that you presently expect the offering to meet such conditions. If management subsequently concludes the conditions may not be satisfied, please revise the filing accordingly.

Risk Factors, page 13

11. Please add a risk factor describing the risks related to your significant goodwill balance. We note that goodwill represented approximately 64% of your total asset balance at September 30, 2013.

12. We note that several of your risk factors are long and overly broad, such that they include more than one risk factor under one subheading. For instance, we note that the first risk factor beginning on page 35 and the second risk factor beginning on page 41 are two pages long, and the first risk factor beginning on page 24 is four pages long. Please revise to present each risk under a separate, more specific caption.

The safety and efficacy of our products…, page 17

13. Please revise your disclosure in the risk factor or business sections, as appropriate, to clarify why you are currently launching postmarket studies of the three products you identify. For instance, revise to indicate whether you are conducting these studies to support FDA approval of existing and/or future products, whether your decision to undertake the studies was voluntary, and why you are conducting studies for these three products but not for other products that you identify in the Business section. Also, please revise your disclosure of risks on page 4 to highlight and explain the risks concerning your lack of long-term clinical data to support the safety and efficacy of your products.

Use of Proceeds, page 56

14. Please revise the second paragraph on page 56 to disclose the approximate amounts intended for each of the purposes you identify, including the purposes identified in the final sentence of the paragraph. To the extent that any of the amounts will be paid to affiliates, such as for the repayment of stockholder notes, please identify the affiliates and quantify the portion of the proceeds that each affiliate will receive.

Capitalization, page 58

15. Please remove cash and cash equivalents from your capitalization table as cash and cash equivalents are not a component of capitalization.

16. Additionally we note that you are reflecting the automatic conversion of your Series A and B Preferred shares in the "Pro Forma, as Adjusted" column. Given that it appears that these shares automatically convert on the closing of the IPO, please explain to us why these are not presented in a "pro forma" column under Article 11 of Regulation S-X.

Results of Operations, page 68

17. Please expand your disclosure to discuss and quantify each of the significant reasons for revenue changes during each period. For example, clarify the amount of the volume growth that relates to new products or the expansion of existing customers. Please describe the new products that were launched in each period presented and quantify the impact of the launch. Please also explain how and why changes in the mix of U.S. and international revenues impacted your cost of sales.

18. Please revise to explain the reasons why gross profit margins as a percentage of sales increased during the periods presented.

Revolving Credit Facility, page 75

19. We note that your revolving credit facility contains financial covenants relating to minimum Adjusted EBITDA and minimum liquidity. Please revise your filing to quantify the minimum levels required by these and any other significant covenants.

Contractual Obligations, page 76

20. Please revise the table or, if appropriate, include a footnote to explain the royalty and intellectual property commitments you reference on page F-28.

Excess and Obsolete Inventory, page 77

21. We note that you record an inventory "reserve" for excess, obsolete and impaired inventory. Please confirm, if true, that your inventory policies comply with FASB ASC paragraph 330-10-35-14. Revise your filing as necessary.

22. Additionally, we note from your disclosures on page F-15 that your inventory reserve is relatively significant compared to your gross inventory balance. Please expand your MD&A disclosures to explain in greater detail the factors that contribute to the large inventory reserve. If sales of impaired inventory have impacted your gross margins please quantify this effect in your cost of sales discussion.

Stock-Based Compensation, page 78

23. We note that in determining the fair value of your common stock you considered a combination of valuation methodologies including discounted cash flows, market and transaction approaches. Please progressively bridge for us the fair value per share determinations in each valuation to the current estimated IPO price per share. We will delay our assessment of your response pending inclusion of the estimated IPO price in the filing.

Overview, page 85

24. Please refer to Regulation S-K, Item 101(a) and revise to describe the general business of the registrant during the past five years. In this regard, please revise to describe your August 2010 merger transaction and amendments, which are referenced on page F-14. Please also file the merger agreement, all amendments to the merger agreement and the Management Services Agreement as exhibits pursuant to Regulation S-K, Item 601. Also, please describe the material terms of all applicable transactions with your Sponsor, including those relating to the merger, pursuant to Regulation S-K, Item 404(a).

Our Products, page 95

25. Please provide product class disclosure for the full period required by Regulation S-K Item 101(c)(1)(i).

Product Pipeline, page 100

26. Please revise to discuss the FDA regulatory status of the products you identify, including whether you have submitted investigational device exemption and/or 510(k) notification applications.

Intellectual Property, page 103

27. Please refer to Regulation S-K, Item 101(c)(1)(iv) and revise to discuss material licenses and royalty agreements, including those identified on pages 28-29 and on page 43. Describe the material terms of these agreements, including the provisions that may require you to reassign rights back to the original assignor. Please also file all of the license, development and royalty agreements you disclose on these pages as exhibits pursuant to Item 601(b)(10) of Regulation S-K or provide us an explanation of why they are not material.

Reimbursement Overview, page 110

28. We refer to your disclosure on page 81 indicating that insurer pushback questioning the medical necessity of certain degenerative procedures has been one of the most important factors in determining the fair value of your common stock. We also note your disclosure

indicating that degenerative procedures typically receive lower rates of coverage relative to complex spine procedures. Please tell us which degenerative procedures generate reimbursement pushback and indicate whether insurers typically do not reimburse, or provide materially less reimbursement, for any of the degenerative spine technologies that you identify on pages 99-100.

Management, page 112

29. We note your disclosure at the bottom of page 126. Please tell us why you do not identify Lane Major in this section pursuant to Item 401(b) or (c) of Regulation S-K.

30. Please revise to disclose the dates of Messrs. Pelak's and Queally's employment with identified entities.

31. We note your references on pages 101 and 112 to a Board of Scientific Advisors. Please expand your disclosure to describe the board, its function, and its composition. Indicate what actions the board may take and whether it may act independently of your board of directors. Please also disclose how members are compensated for their service on the board, how such compensation is determined, and whether there are any compensation agreements in place.

Principal and Selling Stockholders, page 124

32. Please disclose the natural person or persons who exercise the sole or shared voting and/or dispositive powers with respect to your shares held by WCAS and by FFC.

33. Please tell us why you believe you need not provide the tables required by Regulation S-K Item 403 with regard to your preferred stock. Also tell us (1) which beneficial owners are not identified in your prospectus as a result of those tables not being included, and (2) whether you had transactions involving those unidentified owners or their immediate family members that should be disclosed pursuant to Regulation S-K Item 404 given instruction 1.b of Item 404.

Certain Relationships…, page 126

34. Please disclose the interest rate and any other material terms of all Shareholder Notes referenced in this section.

35. Please disclose the amount of accumulated and unpaid dividends that will be paid to each of your related parties. Please also identify the entity affiliated with Mr. Ranelli to which you issued shares of Series B preferred stock in 2012.

Revenue Recognition, page F-12

36. We note that your international sales outside of your direct markets are transacted with independent distributors who then resell the products to hospital customers. Please explain to us if you offer any incentives to your distributors such price protection, price concessions, return rights, allowances, etc. If applicable please explain how you account for these provisions.

37. As a related matter we note from your disclosures on page 65 that you provide support services to your distributors' end customers. Please explain how the performance of these services affects your revenue recognition for sales to distributors. Also, please explain to us how you account for the costs related to these services.

Note 10 – Redeemable Convertible Preferred Stock, page F-20

38. We note that your Series A Preferred and Series B Preferred shares are redeemable at the greater of (1) accrued value or (2) fair market value. We further note that the fair value was determined by the Company's board of directors. Please explain to us the methodology used and any significant assumptions used in determining the fair market value of your preferred shares.

Note 11 – Stock-based Compensation and Stock Options, page F-23

39. We note that for determining the expected volatility you relied on the volatility of a number of similarly situated public companies, along with other factors deemed relevant by management. Please provide to us the names of the companies you considered peer companies for purposes of determining the volatility assumption, the volatility of each, and tell us how you concluded that each company was similar to you in terms of industry, stage of life cycle, size, and financial leverage. Refer to ASC 718-10-55-25.

40. Additionally please explain to us other factors that management considered in determining its expected volatility assumption.

Exhibits

41. Please file your 2006 Stock Option and Grant Plan and your 2010 Equity Award Plan. Also, we note your risk factor disclosure at the bottom of page 23 concerning your existing lease. Please refer to Regulation S-K, Item 601(b)(10)(ii)(D) and file the lease as an exhibit.

If you intend to respond to these comments with an amended draft registration statement, please submit it and any associated correspondence in accordance with the guidance we provide in the Division's October 11, 2012 announcement on the SEC website at http://www.sec.gov/divisions/corpfin/cfannouncements/drsfilingprocedures101512.htm.

Please keep in mind that we may publicly post filing review correspondence in accordance with our December 1, 2011 policy (http://www.sec.gov/divisions/corpfin/cfannouncements/edgarcorrespondence.htm). If you intend to use Rule 83 (17 CFR 200.83) to request confidential treatment of information in the correspondence you submit on EDGAR, please properly mark that information in each of your confidential submissions to us so we do not repeat or refer to that information in our comment letters to you.

You may contact Eric Atallah at (202) 551-3663 or Lynn Dicker, Reviewing Accountant, at (202) 551-3616 if you have questions regarding comments on the financial statements and related matters. Please contact Joseph McCann at (202) 551-6262 or Mary Beth Breslin, Senior Attorney, at (202) 551-3625 with any other questions.

Sincerely,

/s/ Mary Beth Breslin for

Amanda Ravitz
Assistant Director

cc (via email): Kenneth B. Wallach, Esq. – Simpson Thatcher & Bartlett LLP