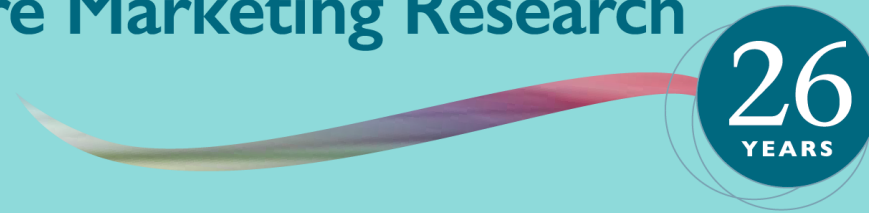


# Olson Research Group

## Healthcare Marketing Research



## A Creative Approach Delivers Meaningful Qualitative Results

Presented in conjunction with




Balanced Pharma has created a new formulation for dentists to use when anesthetizing or numbing patients for dental procedures



**Product X, a pH-balanced anesthetic, has the potential to meet all of these needs. Studies consistently show that pH-balanced local anesthetics provide improved comfort and much faster onset of anesthesia.**

The most often cited feedback from patients is that injections hurt, and it takes too long to get numb.

There is a gap in the market for a dental anesthetic that:

-  Does not cause injection pain
-  Has an immediate therapeutic effect
-  Is simple and easy to use
-  Is reasonably priced

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## Introducing Product X



### Buffered anesthetic in standard dental cartridges

The leading textbook on dental anesthesia, *Malhotra's Handbook of Local Anesthesia, 7th Edition*<sup>1</sup>, concluded that buffered anesthetic, compared with unbuffered anesthetic, is:

1. Faster acting<sup>1,2</sup>
2. Less painful<sup>1-4</sup>
3. More reliable in the presence of inflammation<sup>1,5</sup>

This conclusion is supported by a substantial body of independent, clinical research, including the references cited in this presentation.

BPI intends to conduct post-IND (Phase IV) adequate and well-controlled studies vs lidocaine with epinephrine and articaine with epinephrine to validate these superiority claims.



Product X will be supplied in a standard dental cartridge and available from your favorite dental distributor.



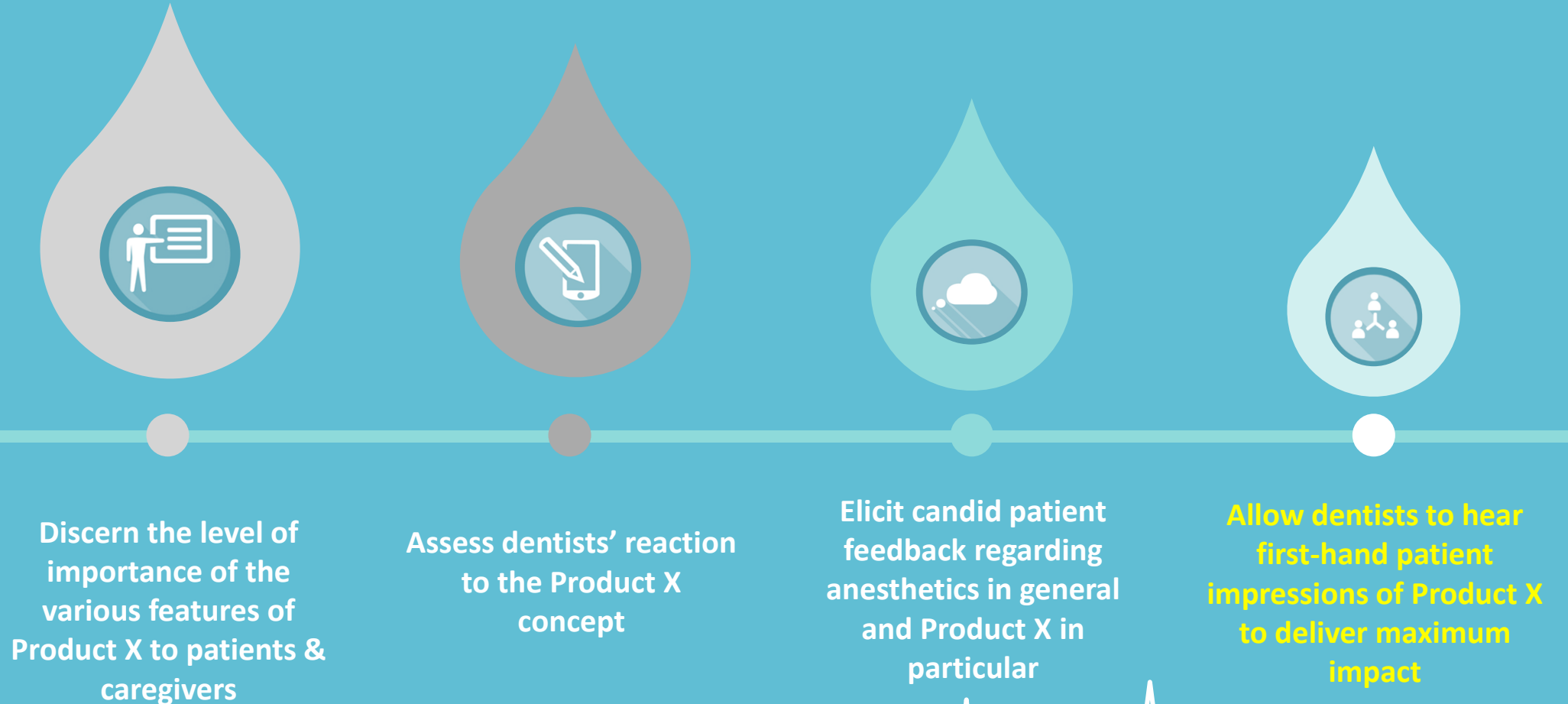
## Product X Target Product Profile



Variable	Product X 2% with Epinephrine 1:100,000	Comparators: Lidocaine 2% with Epinephrine 1:100,000 or Articaine 4% with Epinephrine 1:100,000
Indication	Dental and orofacial local tissue anesthesia in adults and children	
Drug delivery	Standard 1.7ml dental cartridge using standard dental syringe	
Active Ingredients (API)	2% LIDOCAINE with EPINEPHRINE 1:100,000 <i>or</i> Articaine 4% with EPINEPHRINE 1:100,000	
Buffering excipient	Sodium Bicarbonate 1.0%, to neutralize acid	Hydrochloric Acid, to acidify drug product
Pain on injection***	25% less painful	Acidity contributes to the pain of injection
Onset time***	3 times faster	Avg. time for 60% success: 10 min. mandible, 4 min. maxilla
Reliability***	2 times more reliable if inflammation is present	Unreliable in the presence of inflammation
Shelf life	24 months	18–24 months

\*\*\* Current literature, including textbooks and reviewed research, suggests that buffered anesthetic is faster, less painful, and more reliable. BPI intends to conduct pFDA (Phase IV) adequate and well-controlled studies vs comparators to support these superiority claims.

# Research Objectives

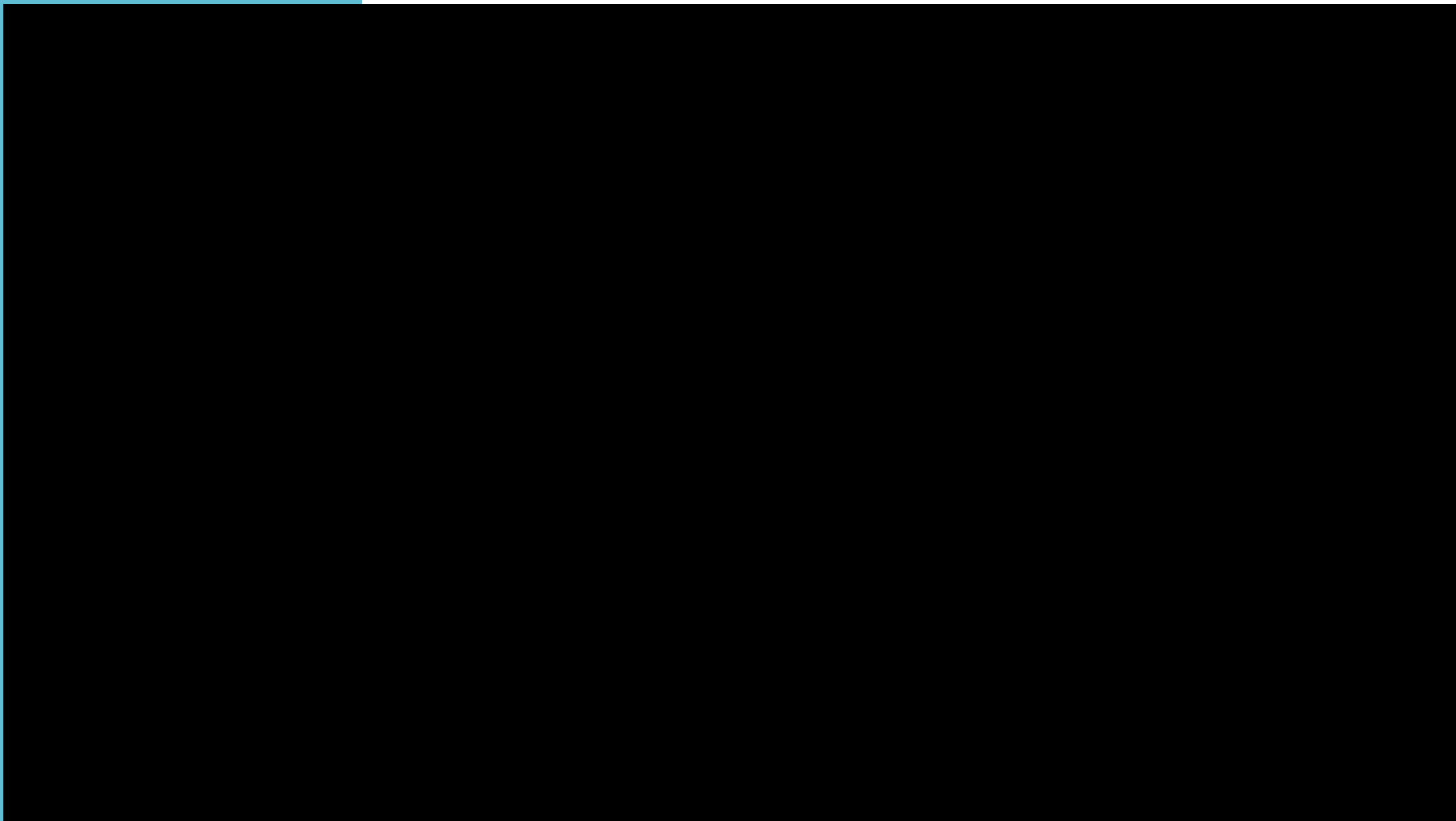




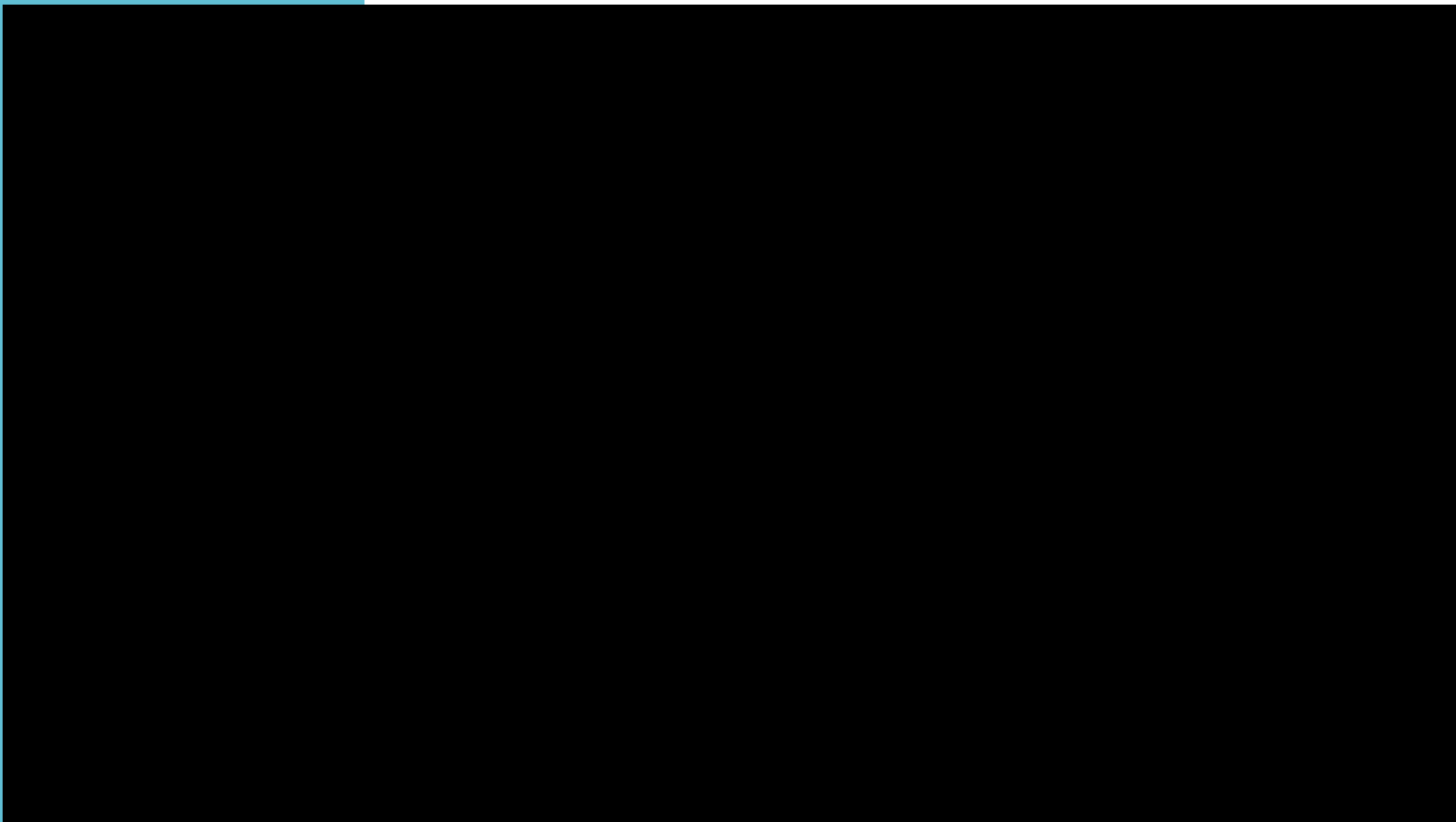
During the pandemic, in-person restrictions have impeded traditional primary market research methodologies.



# Patient Video #1



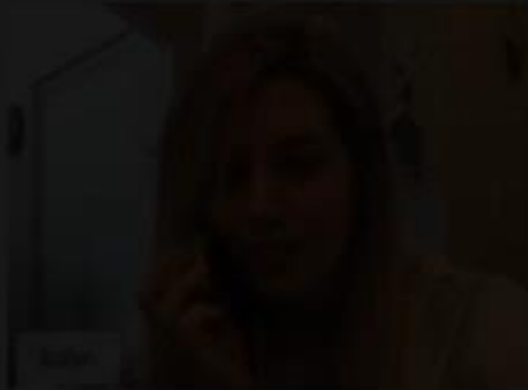
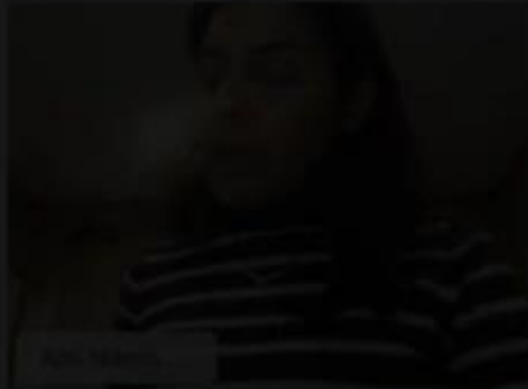
## Patient Video #2





# Patient Video #3

Start the video



	Ultracain®	Current Drug Options
Acidity / pH	<ul style="list-style-type: none"> <li>• Acid free</li> <li>• No acid. Has a pH of 7.2</li> <li>• Similar to water</li> </ul>	<ul style="list-style-type: none"> <li>• Very acidic</li> <li>• pH range of 3.5 to 4.5</li> <li>• Similar to pickle juice</li> </ul>
Pain on injection	<ul style="list-style-type: none"> <li>• Provides a less painful injection</li> <li>• No acid contribution to injection pain</li> <li>• 25% less painful than current drugs</li> </ul>	<ul style="list-style-type: none"> <li>• Acidity adds to the pain of injection</li> </ul>
Onset time	<ul style="list-style-type: none"> <li>• Takes effect twice as fast</li> <li>• Saves time for both the patient and dentist</li> <li>• Reduces the risk of the dentist drilling before the tooth is numb</li> </ul>	<ul style="list-style-type: none"> <li>• Longer onset time</li> <li>• Dentist often leaves the room to wait for anesthesia to take effect</li> <li>• Higher risk that the dentist may start drilling before the patient is numb</li> </ul>
Success	<ul style="list-style-type: none"> <li>• Twice as likely to work on infected teeth</li> <li>• More likely to get a painful tooth numb</li> </ul>	<ul style="list-style-type: none"> <li>• Irreversible anesthesia for infected teeth</li> <li>• Less likely to get a painful tooth numb</li> </ul>
Safety	<ul style="list-style-type: none"> <li>• Safety profile identical to the current drug options</li> </ul>	<ul style="list-style-type: none"> <li>• Safety profile identical to Ultracain</li> </ul>

# Dentist Reactions

*“They’re actually very good...listening to your patients instead of just a doctor talking...they're pretty genuine instead of more scripted which is nice.”*

*“I just found it to be very interesting, they actually, in hearing them speaking to you out loud...I never really thought about that. I thought that was very interesting.”*

01

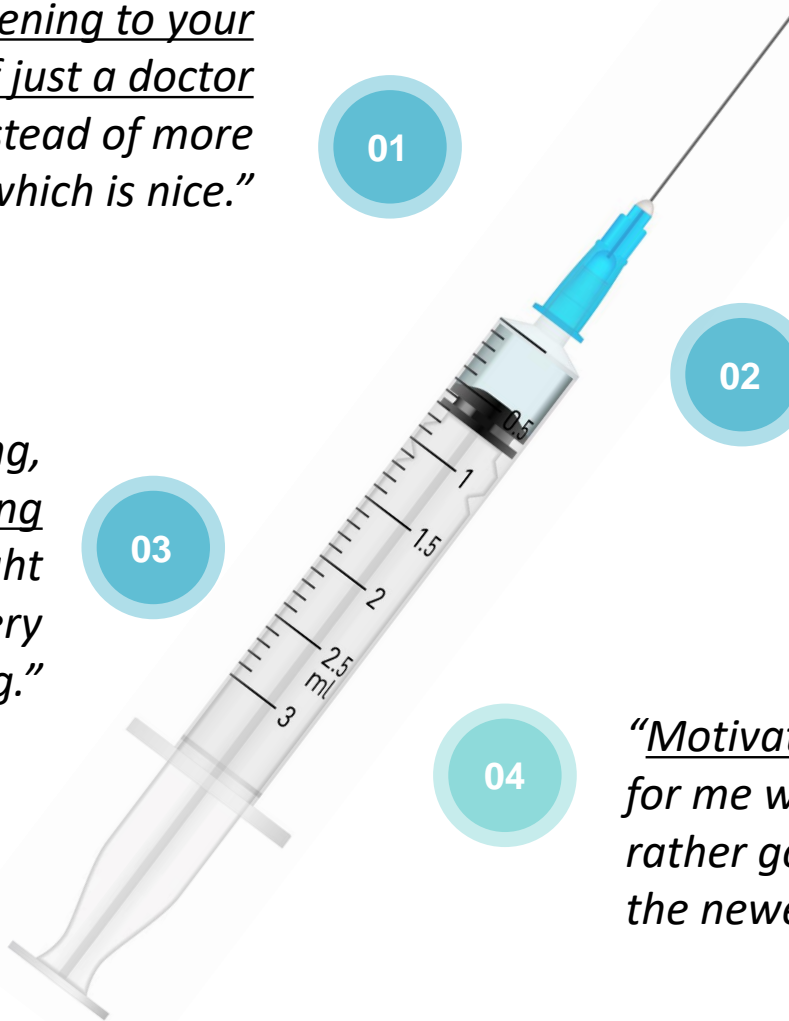
02

*“...it was remarkable that pain is what people think of when they think of going to the dentist. That’s the big thing...us trying to overcome those fears and trying to create a positive impression of dentistry.”*

03

04

*“Motivating...one thing that stood out for me was the woman that would you rather go to another dentist that has the newer stuff...Makes sense.”*



# Presentation Takeaways

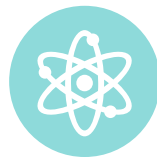
Integrating video vignettes from patients into the provider discussion allows researchers to bring the voice of real patients into the conversations without the need to be in the same physical location and setting.



## Authentic Voice of the Patient

## Creativity Is Essential

Researchers need to be creative in the post-pandemic environment, as traditional in-person research may be restricted based on respondent's willingness to be in an in-person setting with others



Vignettes of reaction to a moderator's questions present a much more realistic and authentic representation of patient opinion than professionally produced material with spokespeople and actors



## Realistic Representation

## Rich Results

This methodology delivered rich findings that the client will use to procure investment, guide pre-launch marketing strategy, and aid development of more in-depth market research instruments



1 2  
3 4

*Olson Research Group is a premier marketing research agency providing full-service marketing research to the healthcare, pharmaceutical, and life sciences industries.*

## What Sets Us Apart?

### Access

Accurate, comprehensive source of US provider data that mirrors the AMA prescribing universe, and extensive reach with all other allied health professionals including nurses, hospital and facility purchasers, KOLs, and payers.



### Experience

Senior-level consultants each possess 20+ years of healthcare marketing research expertise. Strategic recommendations, consistency and quality leading to repeat business and true partnerships.



### Approach

Thorough understanding of your business objectives drives design and deliverables; collaborative approach that supports custom solutions



“Dental injections should hurt less and work faster.”



**Research shows buffered anesthetic is:**

- ✓ Faster acting
- ✓ Less painful when injected
- ✓ More reliable in inflamed tissue

**Our Mission:**

**Develop a buffered anesthetic in a standard dental cartridge that can increase productivity and enhance the patient experience**





Paul oversees the business development and client services function at Olson Research.

Paul was formerly the president of the Pharmaceutical Market Research Group and then the Chairman of Intellus Worldwide, the largest trade association for healthcare market research professionals. He is the recipient of the Clement-Fordyce Lifetime Achievement Award presented by Intellus Worldwide for his contributions to the Life Sciences Market Research Profession.

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Scott is the founder and CEO of Balanced Pharma Incorporated and the inventor of their leading technology, the K-Cartridge™. He has more than 30 years of business and management experience and practiced full-time general dentistry for 28 years.

Today, he uses his wealth of knowledge to help Balanced Pharma develop innovative drugs and devices to make local anesthesia faster acting, more comfortable, and safer for patients across the globe.

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# Thank You

