

IntelliSurvey

POWERING INTELLIGENT RESEARCH

Butterfly iQ3 Image Quality Research Results

May 2025



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Reference & Methodology

Survey Methodology

Research Objective: Understand and compare ultrasound image quality cross multiple ultrasound brands

Survey Details

- **Survey Basics:**
 - 20-minute online quantitative survey
 - Survey fielded in May 2025
- **Respondent qualifications:**
 - Must reside in either Germany, Italy, France, or Spain
 - Must be a Physician, Nurse Practitioner, Paramedic, EMT or Professor of Medicine/ Educator
 - Must specialize primarily in Emergency Medicine, Anesthesiology, Emergency Medical Services/ Pre-Hospital, Critical Care, Primary Care, or Internal Medicine
 - Must have been practicing medicine for 5+ years after residency (or equivalent)
 - Must dedicate at least 50% or more of time to direct patient care
 - Must be able to preform or interpret basic scans independently
- **N=20 total responses from 4 EU countries**
 - DE: n=5 responses
 - FR: n=5 responses
 - IT: n=5 responses
 - ES: n=5 responses

Custom Calculations

Rank Score:

The highest sum represents the most ranked overall image brand. Note: respondents only ranked up to 3 images even if there were more in that preset.

1 st Ranked	2 nd Ranked	3 rd Ranked
+ 3 pts.	+ 2 pts.	+ 1 pt.

Reference Comparison Score:

The highest sum represents the most favored image compared to the reference image, the Butterfly iQ3.

Much better than the reference	+ 2 pts.
Slightly better than the reference	+ 1 pt.
Equivalent to the reference	0 pts.
Slightly worse than the reference but clinically acceptable	-1 pt.
Much worse than the reference and clinically unacceptable	- 2 pts.

Respondent Profiles

n=20

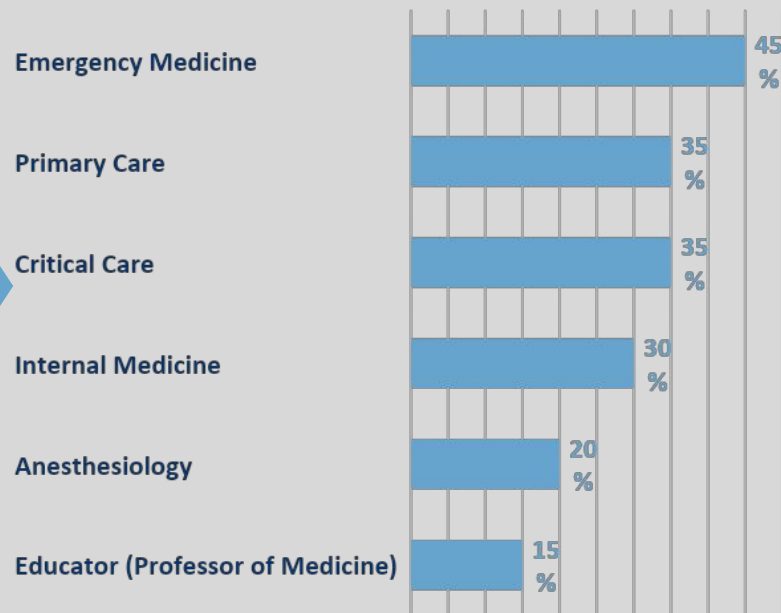
All 20 respondents were:



PHYSICIANS

Who spend an average of 92% of their time devoted to direct patient care

Primary Medical Specialty (Select all that apply)



How many years have you been practicing since completing your residency (or equivalent)?





Executive Summary & Key Takeaways

Scores by Preset

Brand Name	Preset 1: Abdomen		Preset 2: Aorta Gallbladder		Preset 3: Cardiac B Mode		Preset 4: Cardiac Color		Preset 5: Lung		Preset 6: Musculoskeletal		Preset 7: Nerve		Preset 8: OB		Preset 9: Ophthalmic		Preset 10: Small Organ		Preset 11: Carotid		Preset 12: Deep Vein	
	Rank Score ¹	Ref Comp Score ²	Rank Score ¹	Ref Comp Score ²	Rank Score ¹	Ref Comp Score ²	Rank Score ¹	Ref Comp Score ²	Rank Score ¹	Ref Comp Score ²	Rank Score ¹	Ref Comp Score ²	Rank Score ¹	Ref Comp Score ²	Rank Score ¹	Ref Comp Score ²	Rank Score ¹	Ref Comp Score ²	Rank Score ¹	Ref Comp Score ²	Rank Score ¹	Ref Comp Score ²	Rank Score ¹	Ref Comp Score ²
Butterfly iQ3	14	Reference	3	Reference	23	Reference	27	Reference	27	Reference	28	Reference	25	Reference	7	Reference	28	Reference	18	Reference	25	Reference	19	Reference
GE VScan SL	33	16	34	26	10	3	19	-9	20	-13	28	0	16	-1	17	3	43	13	30	11	42	23	36	21
GE VScan CL	17	2	12	2											27	11								
Clarius C3	17	1	15	14											12	-6								
Clarius PAL- HD	4	-9	5	15	9	-6	13	-8	13	-16	34	5	34	17	11	-1	36	15	7	-5	5	3	23	15
Lumify S4-1	12	-4	21	15	22	1	10	-3	18	0	23	-4	34	9					44	14	35	13	18	11
Lumify C5-2	9	-7	5	-9											21	5								
Mindray TE Air	11	-7	22	20	28	14	34	-3	15	-8														
EXO Iris	3	-17	3	-3	28	3	17	-7	27	0	7	-6	11	-3	22	3	11	-4	21	10	13	-10	24	11

7

¹**Rank Score:** Calculated where Rank 1=3pts, Rank 2=2pts, and Rank 3=1pt. The highest sum represents the most ranked overall image brand.

²**Reference Comparison Score:** Calculated where “much better than the reference”= +2 pts, “slightly better than the reference”= +1 pt., “equivalent to the reference”= 0 pts, “slightly worse than the reference”= -1 pt., and “much worse than the reference”= -2 pts. The highest sum represents the most favored image compared to the reference.

Average Unsuitability & Rank

Butterfly iQ3 received the lowest average number of clinically “unsuitable” image votes across all presets and performed above average in terms of overall rank score.

Brand	# of presets where brand was present	# of clinically “unsuitable” images	Average “Unsuitability” (across presets where brand was present)	Average “Rank Score” (across presets where brand was present)
Butterfly iQ3	12	4	0.33	20.33
GE VScan SL	12	13	1.08	27.33
GE VScan CL	3	5	1.67	18.67
Clarius C3	3	3	1.00	12.67
Clarius PAL- HD	12	14	1.17	16.17
Lumify S4-1	10	7	0.70	23.70
Lumify C5-2	3	5	1.67	11.67
Mindray TE Air	5	8	1.60	22.00
EXO Iris	12	28	2.33	15.58

Key Takeaways



Butterfly iQ3 performed above average in overall rank scores and received the lowest average number of clinically “unsuitable” image votes across all presets. Across all presets, Butterfly iQ3 was equivalent or superior to the other models. The Butterfly iQ3 is an acceptable and quality alternative to the other brands, and in some cases, even outperforms them.

- Overall, the Butterfly iQ3 received the 4th highest average rank score across all 12 presets out of the 9 models, placing it above average in overall rank.
- Overall, the Butterfly iQ3 had the lowest average number of “unsuitable for diagnostic decision” ratings of any brand, while the EXO Iris received the most.
- **Takeaways by Preset:**
 - **Preset 1- Abdomen:** The Butterfly iQ3 performed above average comparatively. The GE VScan SL received both the highest rank and reference comparison scores, the EXO Iris received the lowest.
 - **Preset 2- Aorta Gallbladder:** The Butterfly iQ3 scored in the lower half of the rank scores but still outperformed the Lumify C5-2 and EXO Iris comparatively. The GE VScan SL received both the highest rank and reference comparison scores, the Lumify C5-2 received the lowest.
 - **Preset 3- Cardiac B Mode:** The Butterfly iQ3 had the second highest rank score, the Mindray TE Air received both the highest rank and reference comparison scores, and the Clarius PAL-HD received the lowest.
 - **Preset 4- Cardiac Color:** The Butterfly iQ3 had the second highest rank score and outperformed all other images comparatively. The Mindray TE Air received the highest rank score while the Lumify S4-1 received the lowest rank score.
 - **Preset 5- Lung:** The Butterfly iQ3 and EXO Iris tied for the first ranked image while the Clarius PAL-HD was ranked lowest.
 - **Preset 6- Musculoskeletal:** The Butterfly iQ3 tied for second highest rank score and outperformed almost all other images comparatively. The Clarius PAL-HD received the highest rank score.
 - **Preset 7- Nerve:** The Butterfly iQ3 ranked third and outperformed the GE VScan SL and EXO Iris comparatively. The Lumify S4-1 and Clarius PAL-HD received both the highest rank and reference comparison scores.
 - **Preset 8- OB:** Though the Butterfly iQ3 received the lowest rank score, when the images were compared, it outperformed both the Clarius 3 and Clarius PAL-HD.
 - **Preset 9- Ophthalmic:** The Butterfly iQ3 outperformed the EXO Iris when compared. The GE VScan SL and Clarius PAL-HD received the highest rank and reference comparison scores overall.
 - **Preset 10- Small Organ:** The Butterfly iQ3 outperformed the Clarius PAL-HD. The Lumify S4-1 and GE VScan SL received the highest rank and reference comparison scores, while the Clarius PAL-HD received the lowest.
 - **Preset 11- Carotid:** Comparatively, the Butterfly iQ3 had a strong rank score for the Carotid image. The GE VScan SL and Lumify S4-1 received the highest rank and reference comparison scores while the Clarius PAL HD received the lowest rank score. The EXO Iris had the lowest reference comparison score.
 - **Preset 12- Deep Vein:** All images, including the Butterfly iQ3, in this preset were deemed acceptable for diagnostic decision. The GE VScan SL received the highest rank and reference comparison score while the Lumify S4-1 received the lowest.



Preset 1: Abdomen Comparison

Abdomen Rank

Overall, GE VScan SL was ranked the highest quality image. The **Butterfly iQ3** was ranked 3rd.

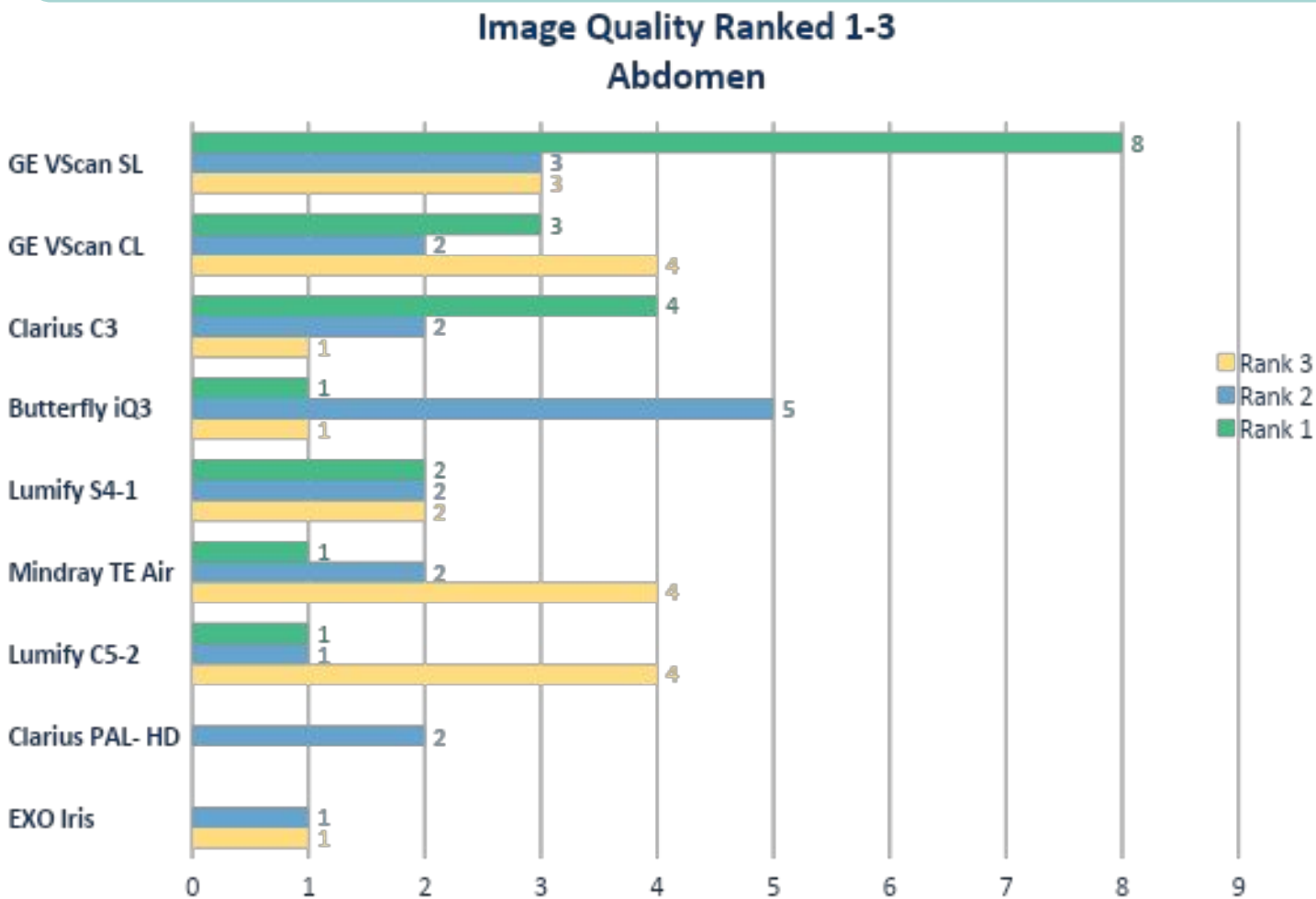


Image Brand	Rank Score*
GE VScan SL	33 pts
Clarius C3	17 pts
GE VScan CL	17 pts
Butterfly iQ3	14 pts
Lumify S4-1	12 pts
Mindray TE Air	11 pts
Lumify C5-2	9 pts
Clarius PAL- HD	4 pts
EXO Iris	3 pts

Q2_1: For each image preset (e.g., cardiac, abdominal, lung, etc.), please rank your top 3 clips or images in order of preference (1 = best)
* Rank-based score: Where a Rank 1=3pts, Rank 2=2pts, and Rank 3=1pt. The highest sum represents the most ranked overall

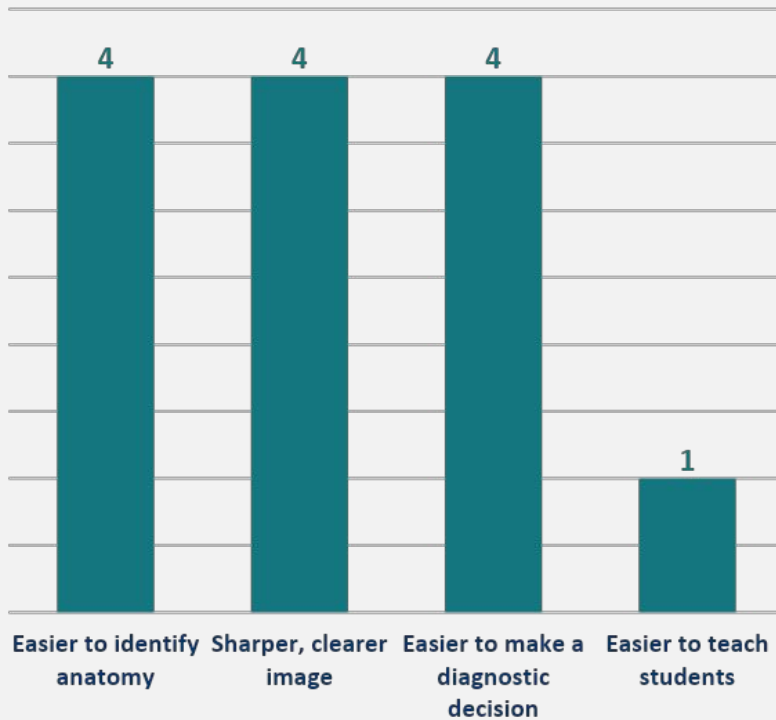
Abdomen Reasons for Selection

'Easier to identify anatomy' and 'sharper, clearer image' were the key drivers of ranking an image #1 among respondents.



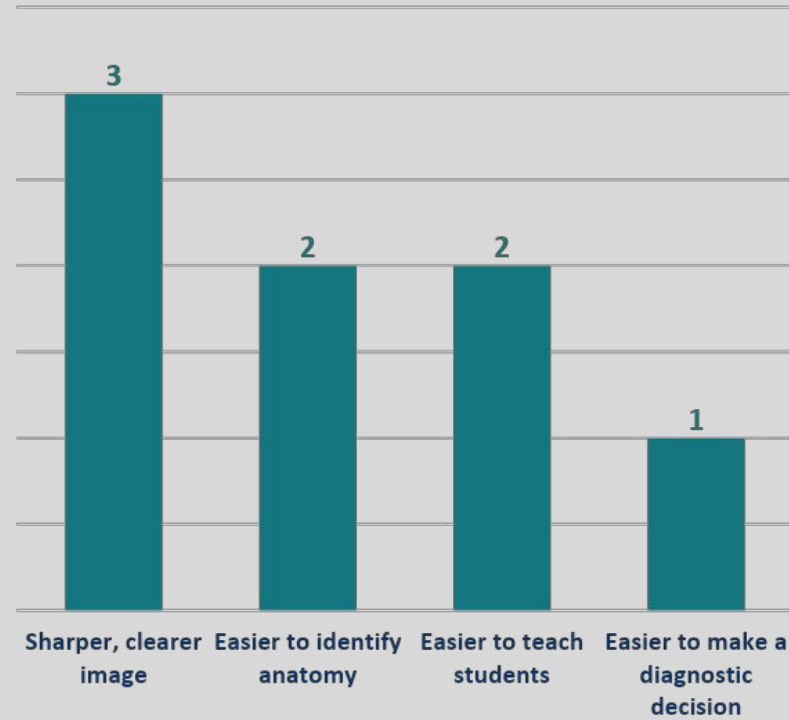
GE VScan SL

Top Reasons for 1st Ranked Selection



Clarius C3

Top Reasons for 1st Ranked Selection



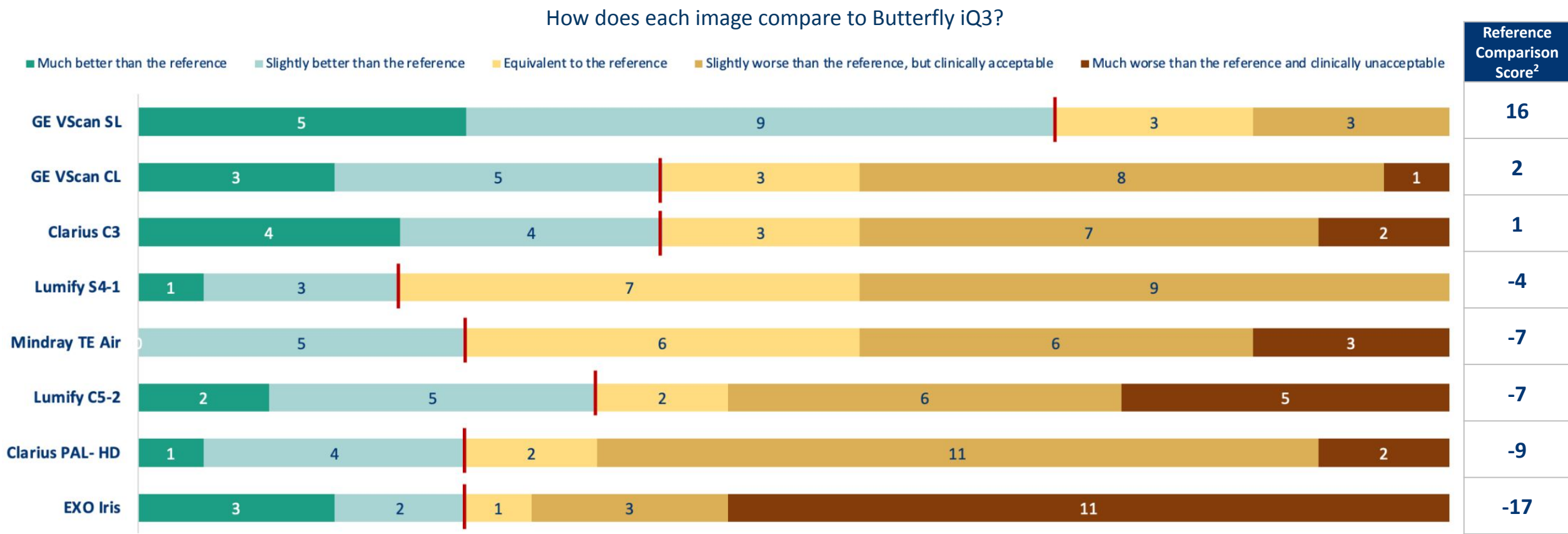
GE VScan CL

Top Reasons for 1st Ranked Selection



Abdomen Image Comparison

Aside from the GE VScan SL, all other devices scored similarly to, lower than, or significantly worse than the **Butterfly iQ3**.



Abdomen Summary

Butterfly iQ3 is a suitable alternative to the other models for abdomen images, performing in the top half of rank scores and no votes for unsuitable clinical image..

Brand/Model Name	Abdomen Rank Score ¹	Clinically "Unsuitable" Votes	Reference Comparison Score ²
GE VScan SL	33	0	16
Clarius C3	17	0	1
GE VScan CL	17	2	2
Butterfly iQ3	14	0	Reference Image
Lumify S4-1	12	0	-4
Mindray TE Air	11	2	-7
Lumify C5-2	9	0	-7
Clarius PAL- HD	4	3	-9
EXO Iris	3	10	-17

Preset 2: Aorta Gallbladder Comparison



Aorta Gallbladder Rank

GE VScan SL was the highest rated image followed by Mindray TE Air and Lumify S4-1. The EXO Iris and Butterfly iQ3 had the lowest scores of the group, though the Butterfly iQ3 did receive a 1st rank by one respondent.

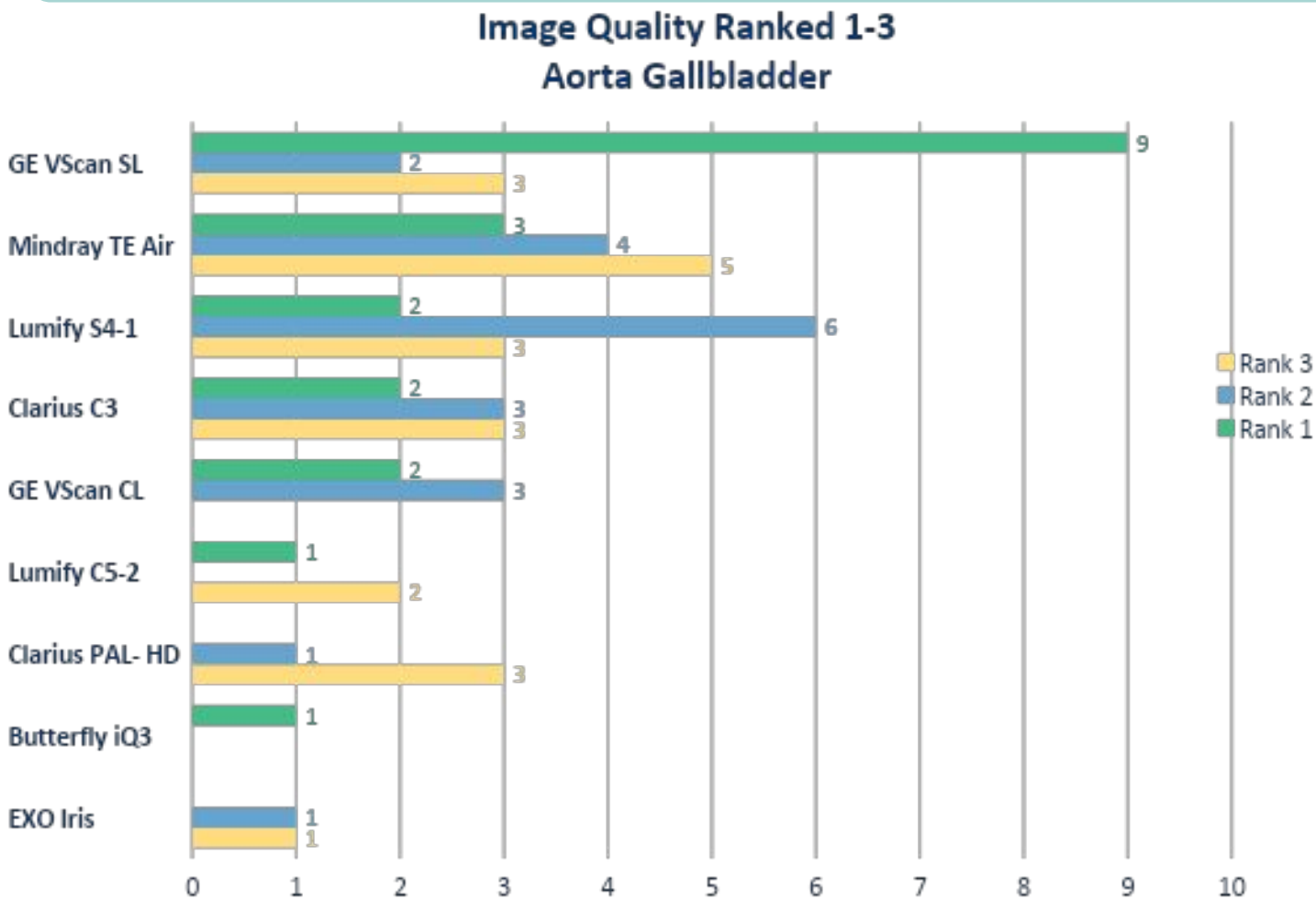


Image Brand	Rank Score ¹
GE VScan SL	34 pts
Mindray TE Air	22 pts
Lumify S4-1	21 pts
Clarius C3	15 pts
GE VScan CL	12 pts
Clarius PAL- HD	5 pts
Lumify C5-2	5 pts
Butterfly iQ3	3 pts
EXO Iris	3 pts

Q2_2: For each image preset (e.g., cardiac, abdominal, lung, etc.), please rank your top 3 clips or images in order of preference (1 = best)
¹Rank Score: Calculated where Rank 1=3pts, Rank 2=2pts, and Rank 3=1pt. The highest sum represents the most ranked overall image brand.

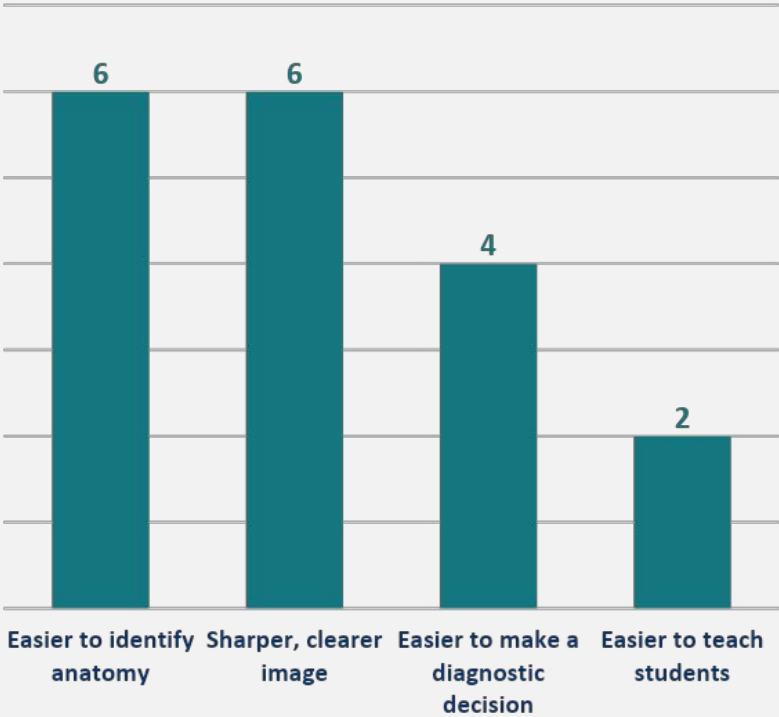
Aorta Gallbladder Reasons for Selection

‘Easier to identify anatomy’ and ‘sharper, clearer image’ both rise to the top again as primary reasons for ranking images number one. However, for the Lumify S4-1, ‘easier to make a diagnostic decision’ was most selected.



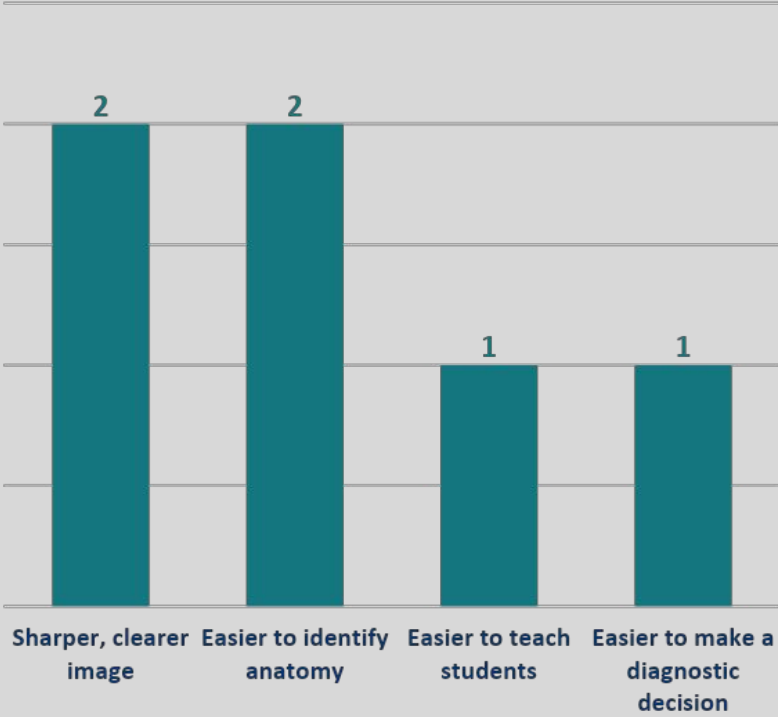
GE VScan SL

Top Reasons for 1st Ranked Selection



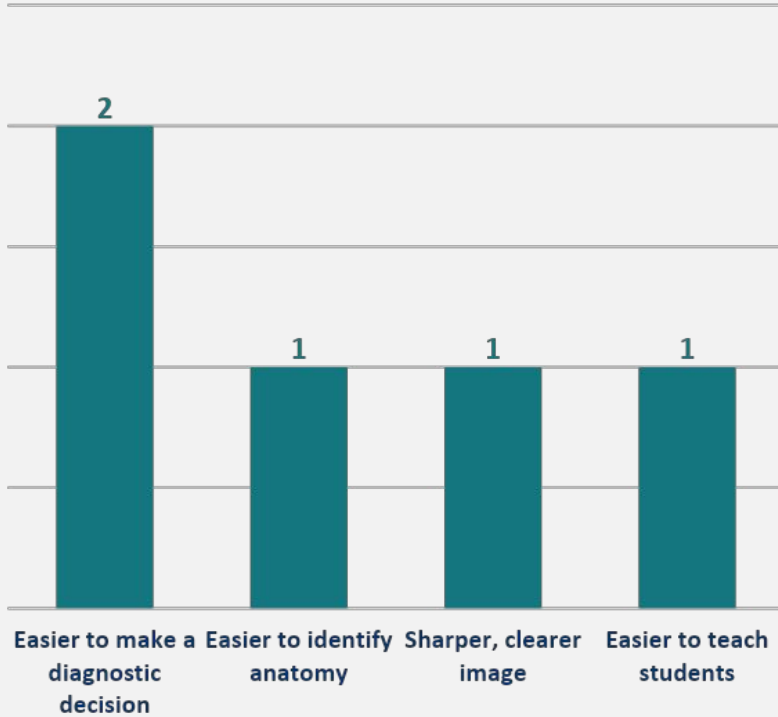
Mindray TE Air

Top Reasons for 1st Ranked Selection



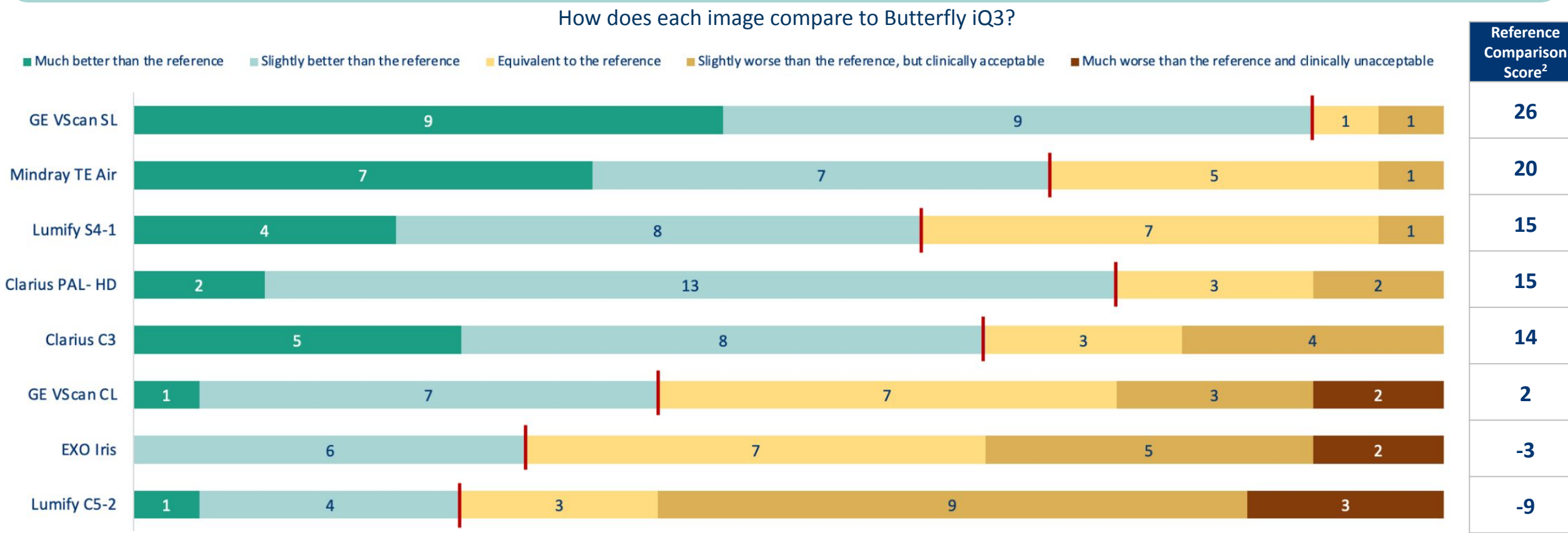
Lumify S4-1

Top Reasons for 1st Ranked Selection



Aorta Gallbladder Image Comparison

5 out of the 8 brands were preferred over Butterfly's aortic gallbladder image. However, **over 50% of respondents preferred Butterfly's iQ3 image compared to GE VScan CL, Lumify C5-2, and EXO Iris.**



Q1_2: For each image or cine clip, please indicate how it compares to the reference image.
Q4_2: Are any of the images presented unsuitable for making a diagnostic decision?
²Reference Comparison Score: Calculated where "much better than the reference"= +2 pts, "slightly better than the reference"= +1 pt., "equivalent to the reference"= 0 pts, "slightly worse than the reference"= -1 pt., and "much worse than the reference"= -2 pts. The highest sum represents the most favored image compared to the reference.

Aorta Gallbladder Summary

Despite lower perceived image quality, Butterfly iQ3 remains a suitable alternative for Aorta/Gallbladder imaging. Only one respondent rated it clinically unsuitable — a result that is comparable to or better than all other probes, except GE VScan SL.

Brand Name	Aorta Gallbladder Rank Score*	Clinically "Unsuitable" Votes	Reference Comparison Score ²
GE VScan SL	34	0	26
Mindray TE Air	22	1	20
Lumify S4-1	21	1	15
Clarius C3	15	1	14
GE VScan CL	12	3	2
Clarius PAL- HD	5	1	15
Lumify C5-2	5	5	-9
Butterfly iQ3	3	1	Reference Image
EXO Iris	3	7	-3

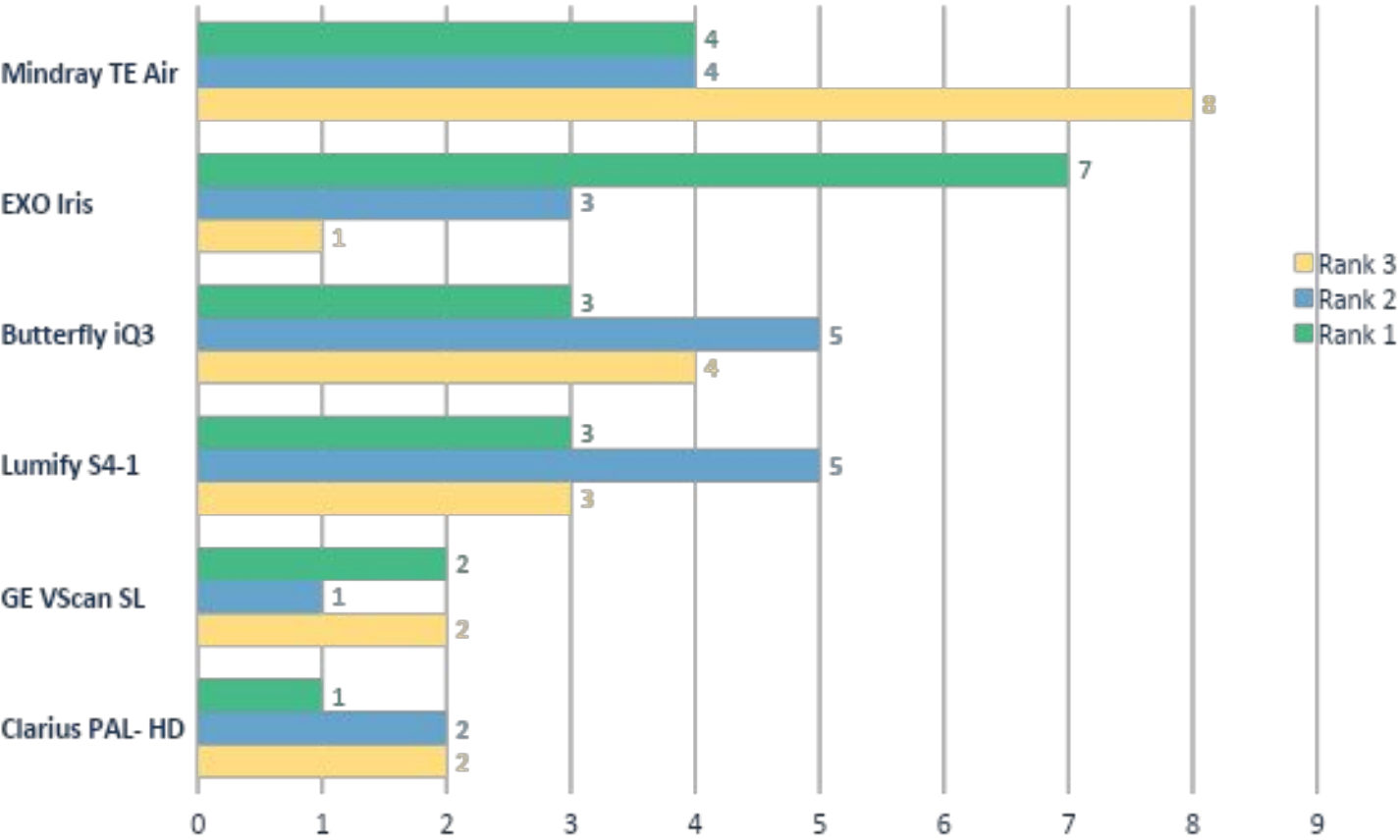


Preset 3: Cardiac B Mode

Cardiac B Mode Rank

The EXO Iris and Mindray TE Air tied for the top ranked overall brand of the Cardiac B Mode videos. **Butterfly iQ3** has the 2nd highest score.

Video Quality Ranked 1-3
Cardiac B Mode



Video Brand	Rank Score ¹
EXO Iris	28
Mindray TE Air	28
Butterfly iQ3	23
Lumify S4-1	22
GE VScan SL	10
Clarius PAL- HD	9

Q2_3: For each video preset (e.g., cardiac, abdominal, lung, etc.), please rank your top 3 clips or images in order of preference (1 = best)
¹Rank Score: Calculated where Rank 1=3pts, Rank 2=2pts, and Rank 3=1pt. The highest sum represents the most ranked overall image brand.

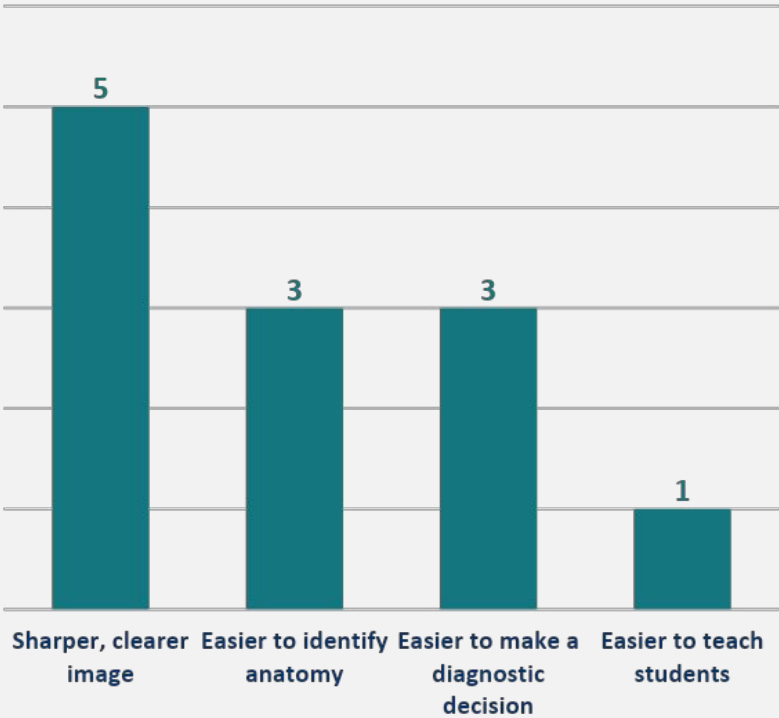
Cardiac B Mode Reasons for Selection

The EXO Iris and Mindray TE Air were ranked 1st due to a 'sharper, clearer image', but the Butterfly iQ3 was ranked 1st because of 'easier to identify anatomy' in the Cardiac B Mode video.



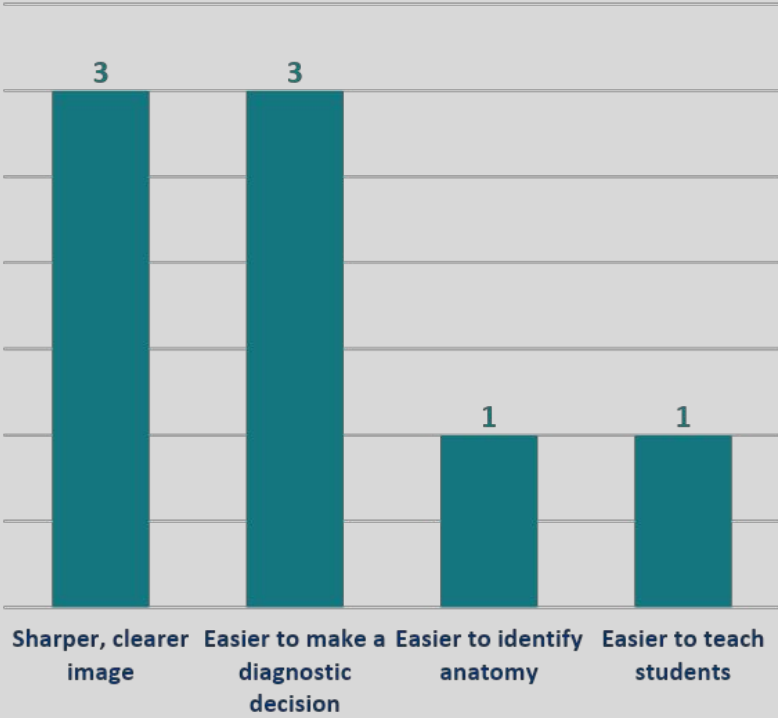
EXO Iris

Top Reasons for 1st Ranked Selection



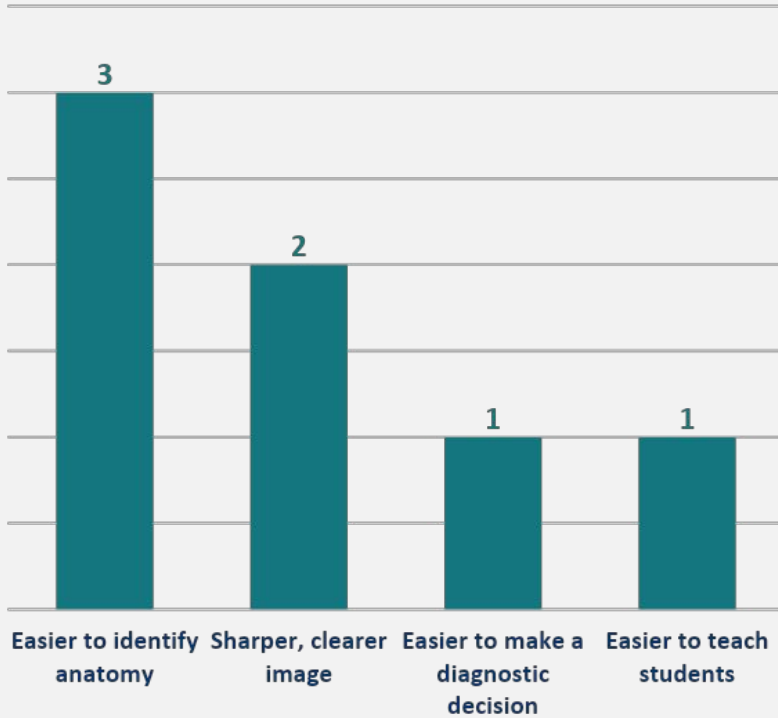
Mindray TE Air

Top Reasons for 1st Ranked Selection



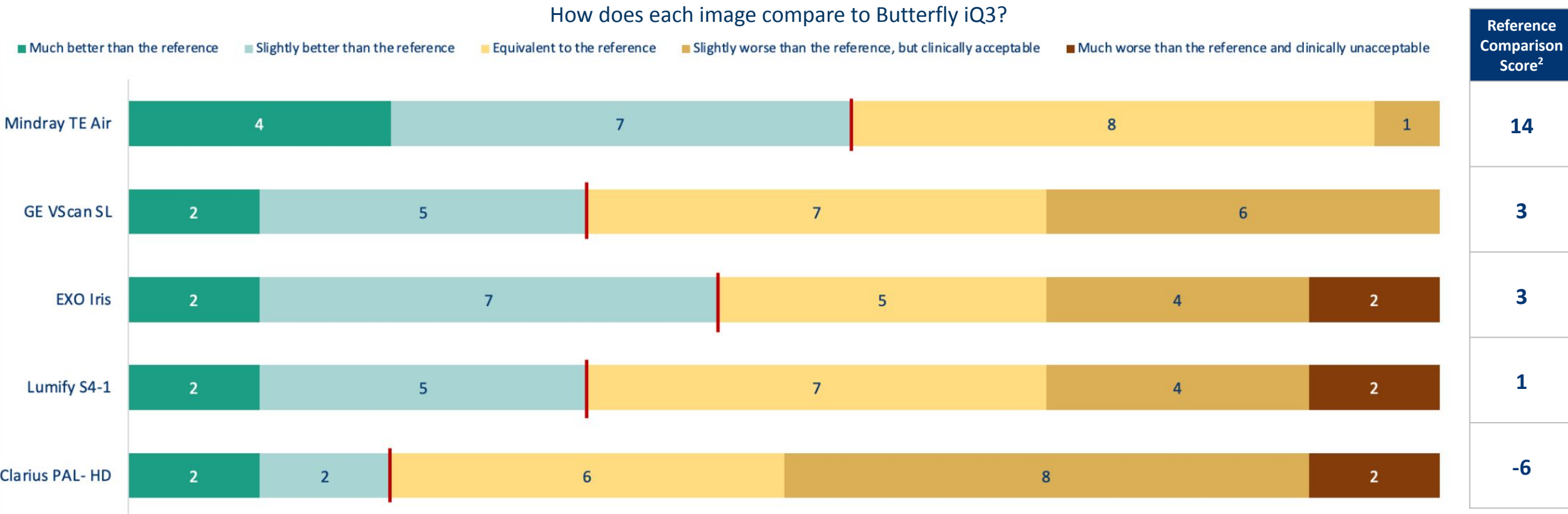
Butterfly iQ3

Top Reasons for 1st Ranked Selection



Cardiac B Mode Image Comparison

Butterfly iQ3 held its ground as the reference, with most devices scoring only slightly higher or on par, and no clear standout outperformer. Only Mindray TE Air clearly stood out as the top performer in image quality



Q1_3: For each image or cine clip, please indicate how it compares to the reference image.
Q4_3: Are any of the images presented unsuitable for making a diagnostic decision?
²Reference Comparison Score: Calculated where “much better than the reference”= +2 pts, “slightly better than the reference”= +1 pt., “equivalent to the reference”= 0 pts, “slightly worse than the reference”= -1 pt., and “much worse than the reference”= -2 pts. The highest sum represents the most favored image compared to the reference.

Cardiac B Mode Summary

Butterfly iQ3 is a suitable alternative to the other models for cardiac b mode images, performing in the top half of rank scores.

Brand Name	Cardiac B Mode Rank Score*	Clinically"Unsuitable" Votes	Reference Comparison Score ²
EXO Iris	28	1	3
Mindray TE Air	28	1	14
Butterfly iQ3	23	1	Reference Video
Lumify S4-1	22	1	1
GE VScan SL	10	2	3
Clarius PAL- HD	9	1	-6

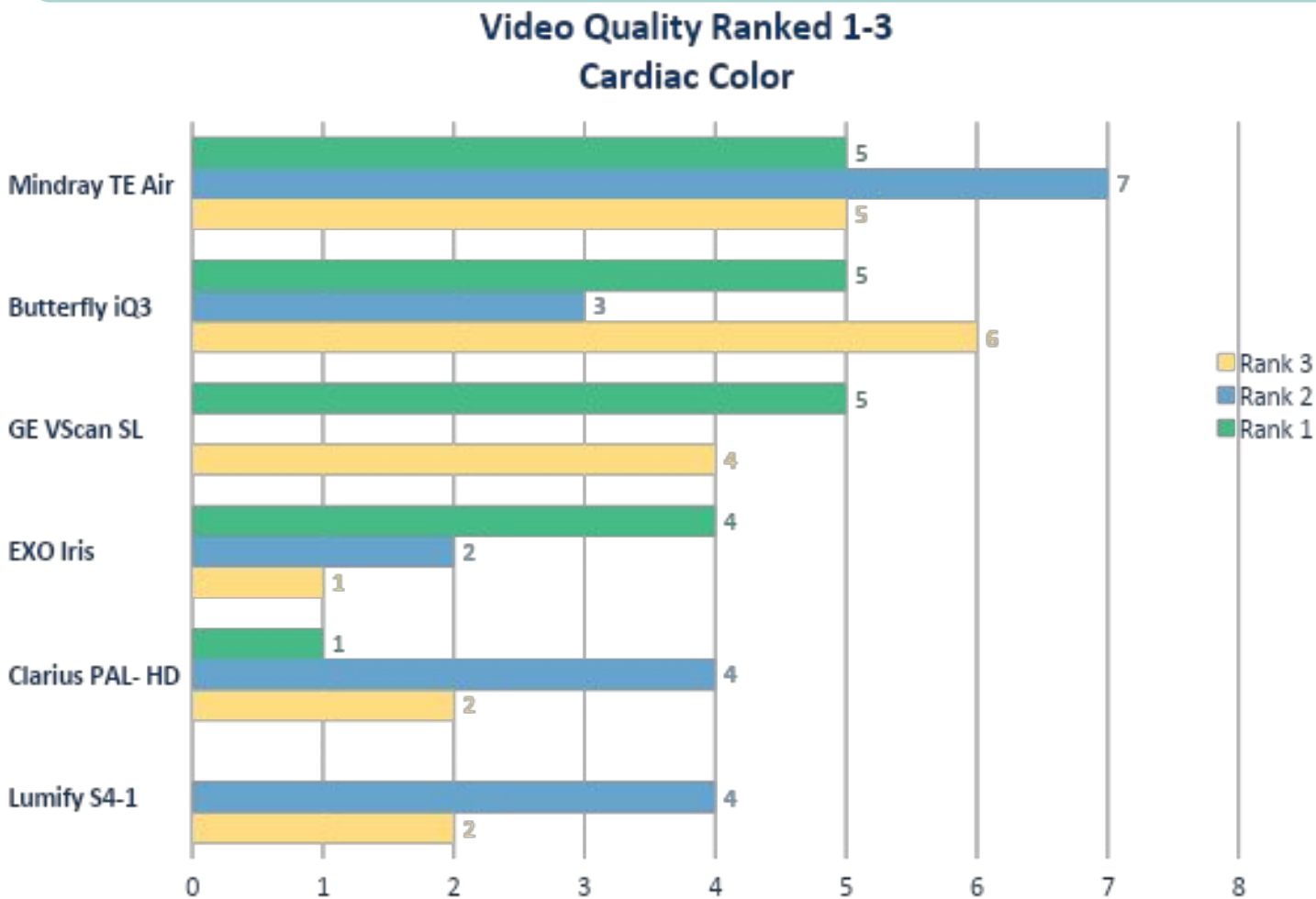
¹**Rank Score:** Calculated where Rank 1=3pts, Rank 2=2pts, and Rank 3=1pt. The highest sum represents the most ranked overall image brand.
²**Reference Comparison Score:** Calculated where “much better than the reference”= +2 pts, “slightly better than the reference”= +1 pt., “equivalent to the reference”= 0 pts, “slightly worse than the reference”= -1 pt., and “much worse than the reference”= -2 pts. The highest sum represents the most favored image compared to the reference.



Preset 4: Cardiac Color

Cardiac Color Rank

The Mindray TE Air received the highest rank of the Cardiac Color videos, followed by the **Butterfly iQ3** in 2nd and the GE VScan SL in 3rd.



Video Brand	Rank Score ¹
Mindray TE Air	34
Butterfly iQ3	27
GE VScan SL	19
EXO Iris	17
Clarius PAL- HD	13
Lumify S4-1	10

Q2_4: For each video preset (e.g., cardiac, abdominal, lung, etc.), please rank your top 3 clips or images in order of preference (1 = best)
¹Rank Score: Calculated where Rank 1=3pts, Rank 2=2pts, and Rank 3=1pt. The highest sum represents the most ranked overall image brand.

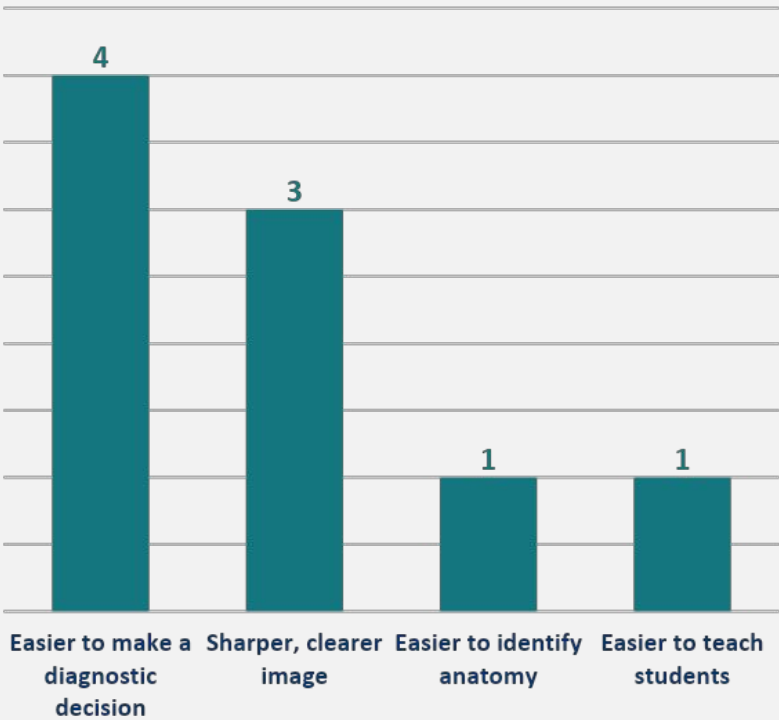
Cardiac Color Reasons for Selection

The top ranked Mindray TE Air was primarily selected because it is 'easier to make a diagnostic decision' while **Butterfly iQ3** was selected both for its 'sharper, clearer image' and 'easier to identify anatomy'.



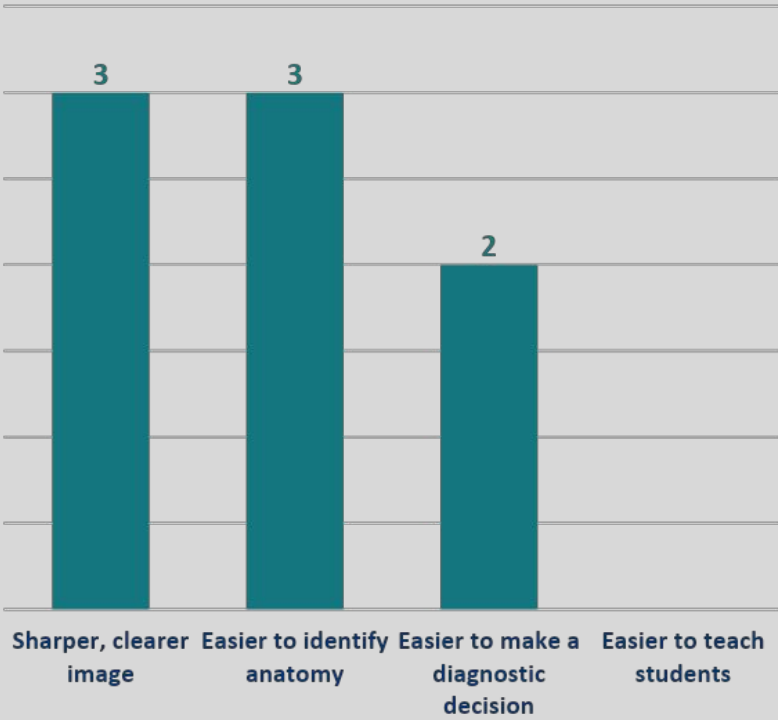
Mindray TE Air

Top Reasons for 1st Ranked Selection



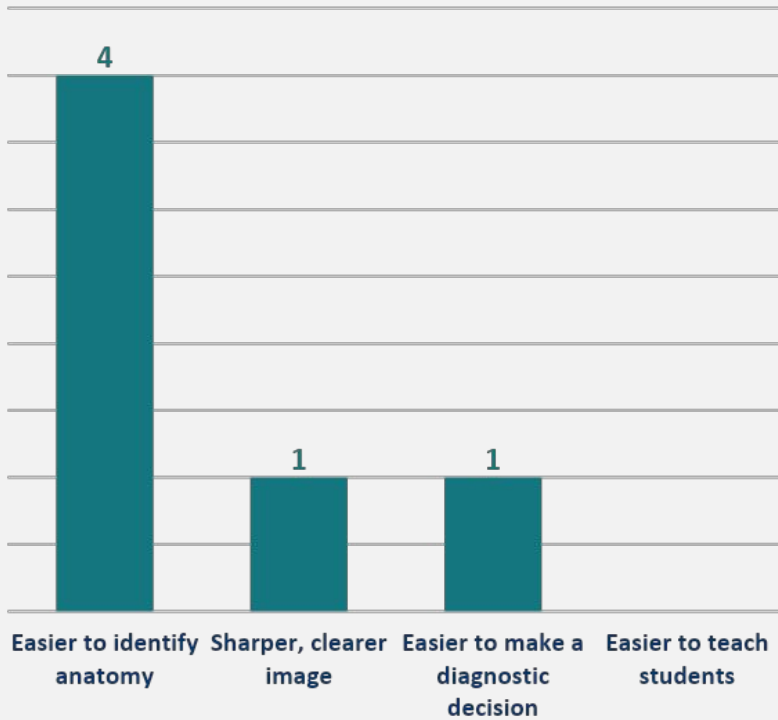
Butterfly iQ3

Top Reasons for 1st Ranked Selection



GE VScan SL

Top Reasons for 1st Ranked Selection



Cardiac Color Image Comparison

Butterfly iQ3 outperformed all comparison devices for Cardiac Color

How does each image compare to Butterfly iQ3?



Q1_4: For each image or cine clip, please indicate how it compares to the reference image.
Q4_4: Are any of the images presented unsuitable for making a diagnostic decision?
²Reference Comparison Score: Calculated where “much better than the reference”= +2 pts, “slightly better than the reference”= +1 pt., “equivalent to the reference”= 0 pts, “slightly worse than the reference”= -1 pt., and “much worse than the reference”= -2 pts. The highest sum represents the most favored image compared to the reference.

Cardiac Color Summary

Butterfly iQ3 is a suitable alternative to the other models for cardiac color images, performing in the top half of rank scores. It is the only probe that received no votes for unsuitable clinical image.

Brand Name	Cardiac Color Rank Score*	Clinically "Unsuitable" Votes	Reference Comparison Score ²
Mindray TE Air	34	1	-3
Butterfly iQ3	27	0	Reference Video
GE VScan SL	19	3	-9
EXO Iris	17	2	-7
Clarius PAL- HD	13	2	-8
Lumify S4-1	10	2	-3

¹Rank Score: Calculated where Rank 1=3pts, Rank 2=2pts, and Rank 3=1pt. The highest sum represents the most ranked overall image brand.
²Reference Comparison Score: Calculated where "much better than the reference"= +2 pts, "slightly better than the reference"= +1 pt., "equivalent to the reference"= 0 pts, "slightly worse than the reference"= -1 pt., and "much worse than the reference"= -2 pts. The highest sum represents the most favored image compared to the reference.



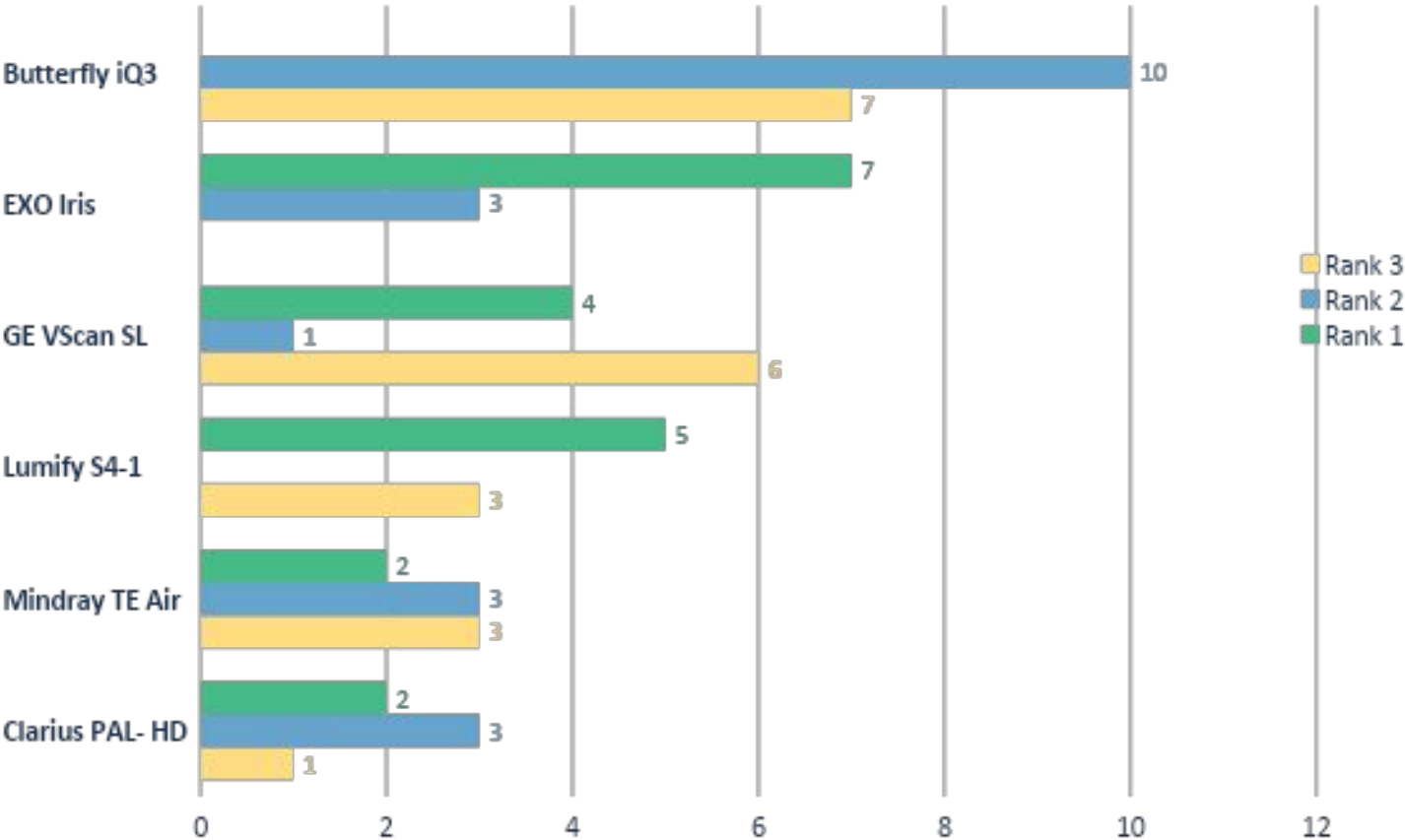
Preset 5: Lung

Lung Rank

The EXO Iris and **Butterfly iQ3** both tied for the **top rank score** followed by the GE VScan SL in 2nd place.

Video Quality Ranked 1-3

Lung



Video Brand	Rank Score ¹
EXO Iris	27
Butterfly iQ3	27
GE VScan SL	20
Lumify S4-1	18
Mindray TE Air	15
Clarius PAL- HD	13

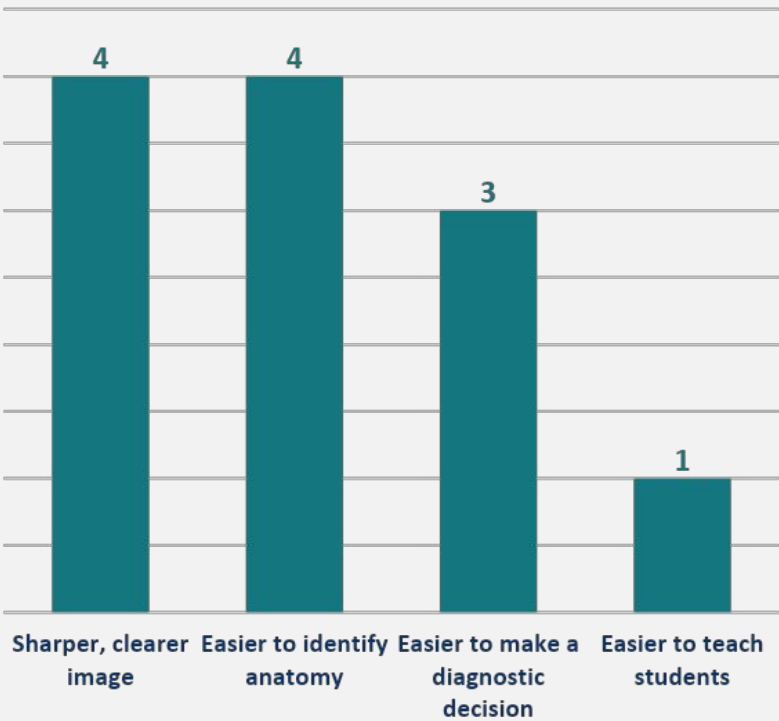
Lung Reasons for Selection

‘Easier to identify anatomy’ was a top reason that both the EXO Iris and GE VScan SL were ranked 1st, though the EXO Iris also had a ‘sharper, clearer image’.



EXO Iris

Top Reasons for 1st Ranked Selection



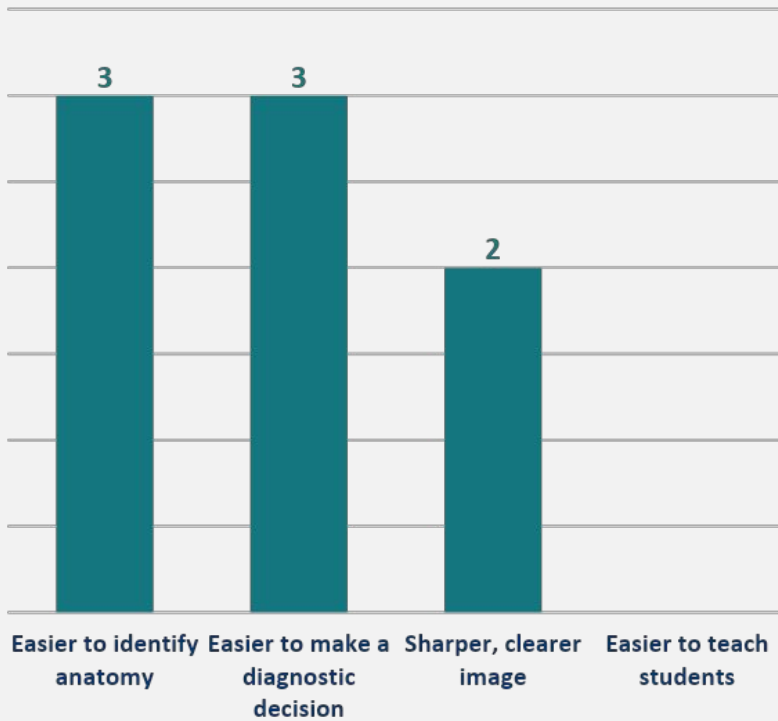
Butterfly iQ3

Despite a high overall rank score, the Butterfly iQ3 did not receive any first place votes and therefore has no collected data for this question.



GE VScan SL

Top Reasons for 1st Ranked Selection



Lung Image Comparison

Butterfly iQ3 matched or exceeded the image quality of all Lung comparison videos

How does each image compare to Butterfly iQ3?



Q1_5: For each image or cine clip, please indicate how it compares to the reference image.

Q4_5: Are any of the images presented unsuitable for making a diagnostic decision?

²Reference Comparison Score: Calculated where “much better than the reference”= +2 pts, “slightly better than the reference”= +1 pt., “equivalent to the reference”= 0 pts, “slightly worse than the reference”= -1 pt., and “much worse than the reference”= -2 pts. The highest sum represents the most favored image compared to the reference.

Lung Summary

Butterfly iQ3 is a suitable alternative to the other models for lung images, performing in the top half of rank scores. Once again, it is the only probe that received no votes for unsuitable clinical image.

Brand Name	Lung Rank Score*	Clinically "Unsuitable" Votes	Reference Comparison Score ²
EXO Iris	27	2	0
Butterfly iQ3	27	0	Reference Video
GE VScan SL	20	3	-13
Lumify S4-1	18	1	0
Mindray TE Air	15	3	-8
Clarius PAL- HD	13	2	-16

¹**Rank Score:** Calculated where Rank 1=3pts, Rank 2=2pts, and Rank 3=1pt. The highest sum represents the most ranked overall image brand.
²**Reference Comparison Score:** Calculated where “much better than the reference”= +2 pts, “slightly better than the reference”= +1 pt., “equivalent to the reference”= 0 pts, “slightly worse than the reference”= -1 pt., and “much worse than the reference”= -2 pts. The highest sum represents the most favored image compared to the reference.



Preset 6: Musculoskeletal

Musculoskeletal Rank

The Clarius PAL-HD received the highest number of 1st rank votes, making it the highest overall rank for the musculoskeletal image. **Butterfly iQ3** and GE VScan SL both tied for **2nd place**.

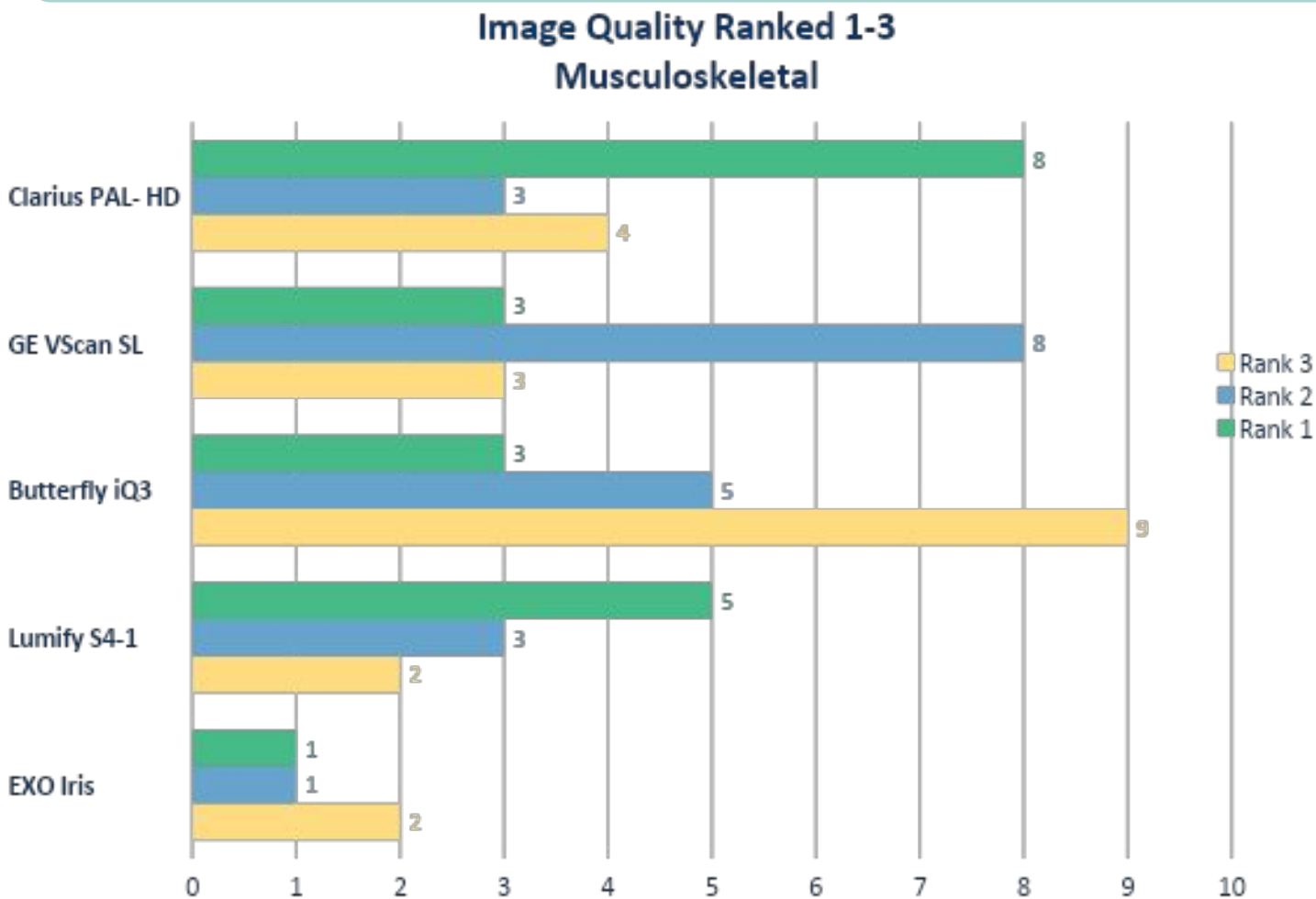


Image Brand	Rank Score ¹
Clarius PAL- HD	34
Butterfly iQ3	28
GE VScan SL	28
Lumify S4-1	23
EXO Iris	7

Q2_6: For each image preset (e.g., cardiac, abdominal, lung, etc.), please rank your top 3 clips or images in order of preference (1 = best)
¹Rank Score: Calculated where Rank 1=3pts, Rank 2=2pts, and Rank 3=1pt. The highest sum represents the most ranked overall image brand.

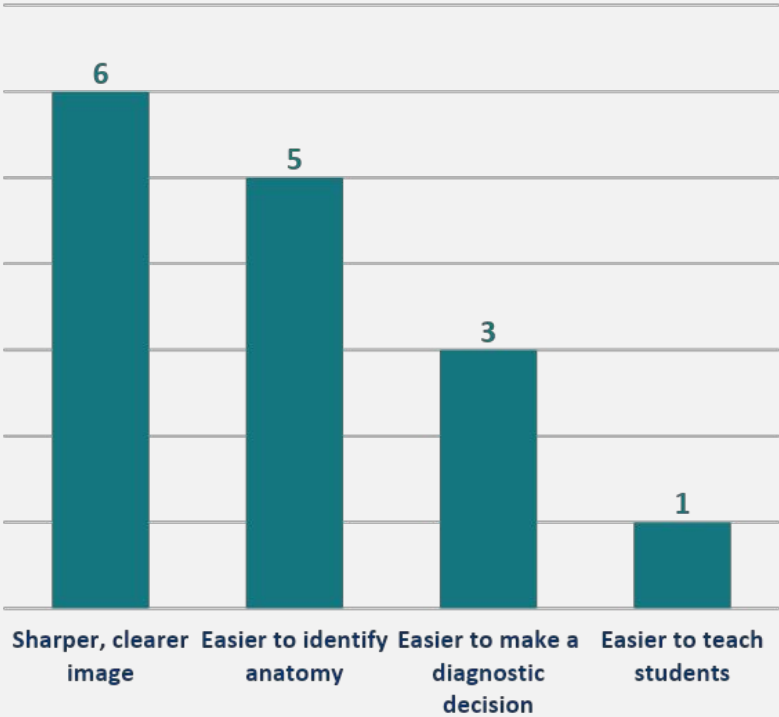
Musculoskeletal Reasons for Selection

The Clarius PAL-HD was ranked first primarily due to its ‘sharper, clearer image’, while Butterfly iQ3 and GE VScan SL were selected due to ‘easier to identify anatomy’.



Clarius PAL-HD

Top Reasons for 1st Ranked Selection



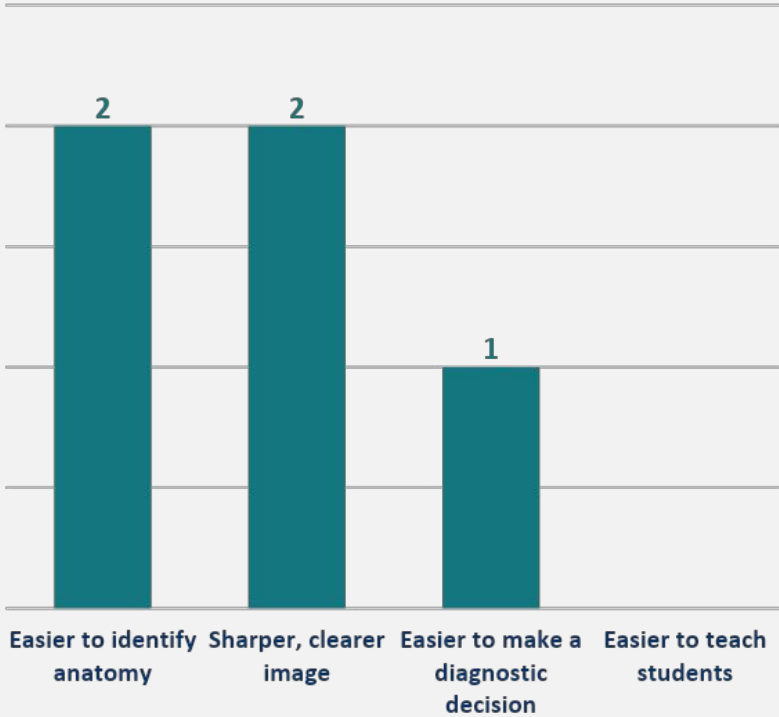
Butterfly iQ3

Top Reasons for 1st Ranked Selection



GE VScan SL

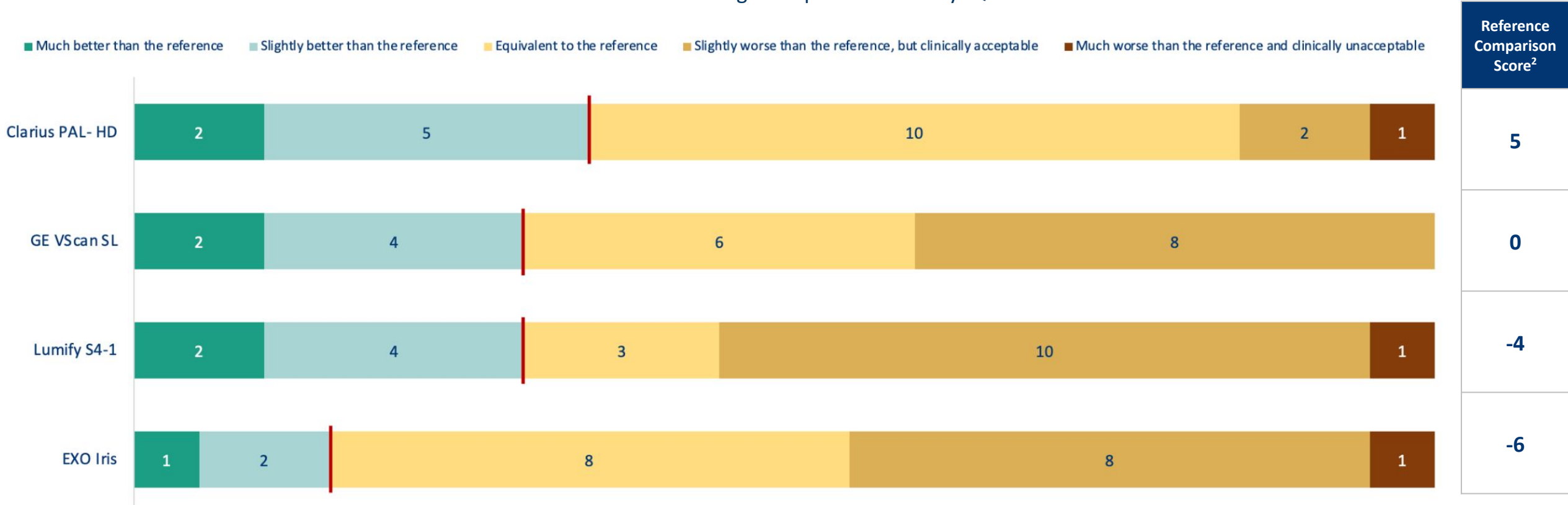
Top Reasons for 1st Ranked Selection



Musculoskeletal Comparison

Butterfly iQ3 out performed most other models with the exception of Clarius PAL-HD

How does each image compare to Butterfly iQ3?



Q1_6: For each image or cine clip, please indicate how it compares to the reference image.
Q4_6: Are any of the images presented unsuitable for making a diagnostic decision?
²Reference Comparison Score: Calculated where “much better than the reference”= +2 pts, “slightly better than the reference”= +1 pt., “equivalent to the reference”= 0 pts, “slightly worse than the reference”= -1 pt., and “much worse than the reference”= -2 pts. The highest sum represents the most favored image compared to the reference.

Musculoskeletal Summary

The Butterfly iQ3 is a suitable alternative to other models for musculoskeletal imaging, ranking in the top half of performance scores and receiving no votes indicating unsuitable clinical images.

Brand Name	Musculoskeletal Rank Score*	Clinically "Unsuitable" Votes	Reference Comparison Score ²
Clarius PAL- HD	34	0	5
Butterfly iQ3	28	0	Reference image
GE VScan SL	28	2	0
Lumify S4-1	23	1	-4
EXO Iris	7	2	-6

¹**Rank Score:** Calculated where Rank 1=3pts, Rank 2=2pts, and Rank 3=1pt. The highest sum represents the most ranked overall image brand.
²**Reference Comparison Score:** Calculated where “much better than the reference”= +2 pts, “slightly better than the reference”= +1 pt., “equivalent to the reference”= 0 pts, “slightly worse than the reference”= -1 pt., and “much worse than the reference”= -2 pts. The highest sum represents the most favored image compared to the reference.



Preset 7: Nerve

Nerve Rank

The Clarius PAL-HD and Lumify S4-1 tied for the top rank score followed by **Butterfly iQ3** in 2nd place.

Image Quality Ranked 1-3

Nerve

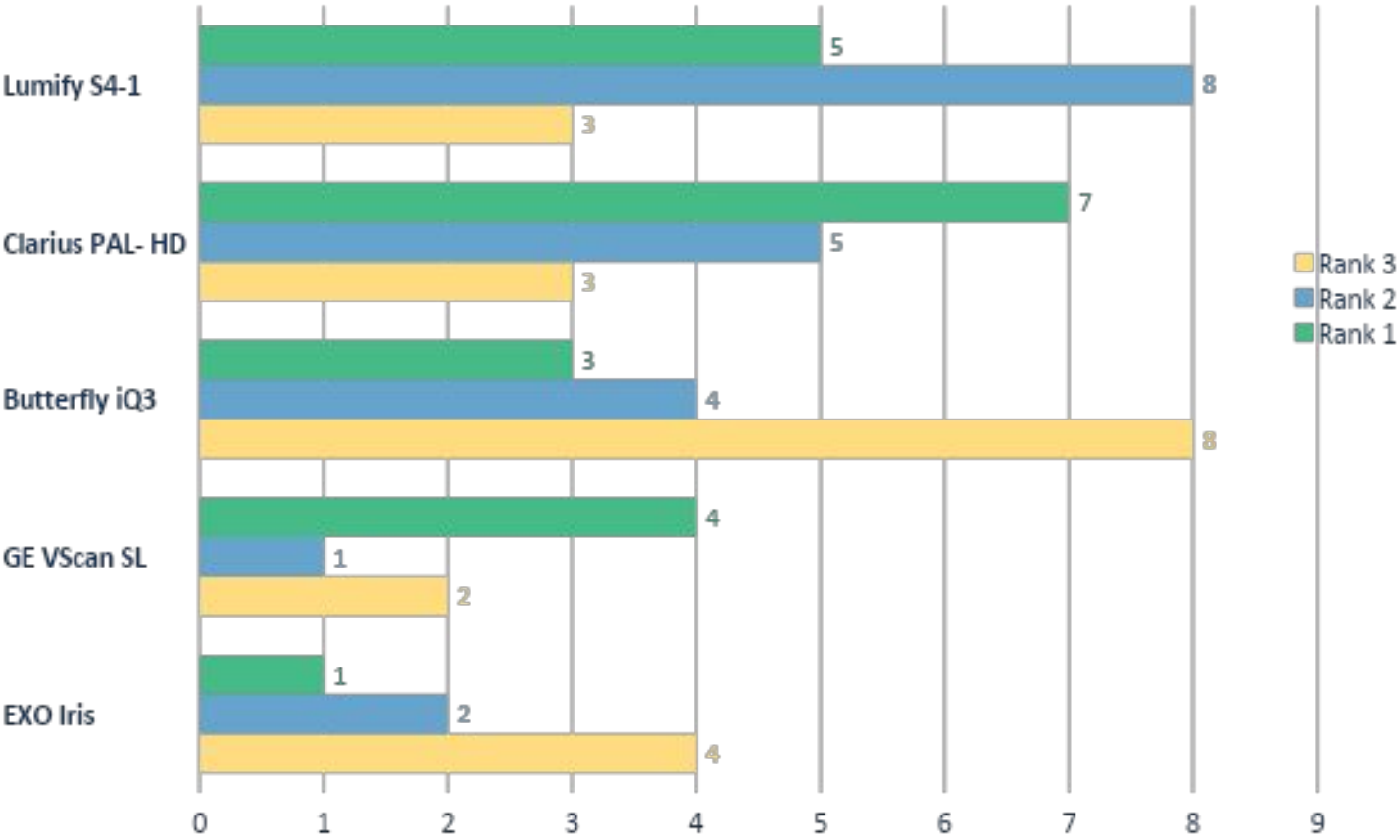


Image Brand	Rank Score ¹
Clarius PAL- HD	34
Lumify S4-1	34
Butterfly iQ3	25
GE VScan SL	16
EXO Iris	11

Q2_7: For each image preset (e.g., cardiac, abdominal, lung, etc.), please rank your top 3 clips or images in order of preference (1 = best)
¹Rank Score: Calculated where Rank 1=3pts, Rank 2=2pts, and Rank 3=1pt. The highest sum represents the most ranked overall image brand.

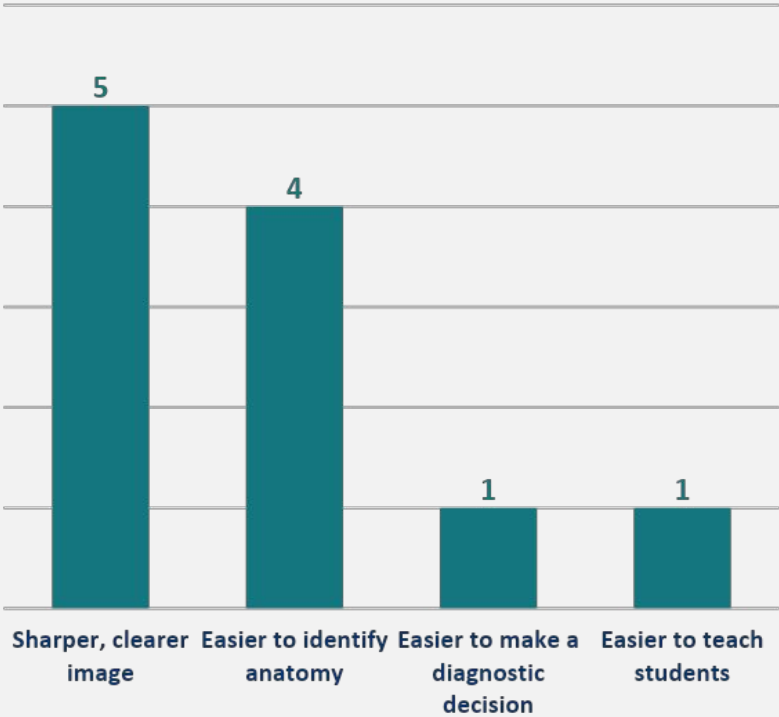
Nerve Reasons for Selection

Those that ranked the Clarius PAL-HD first did so primarily because of the ‘clearer, sharper image’, while those that ranked the Lumify S4-1 first did so due to ‘easier to identify anatomy’.



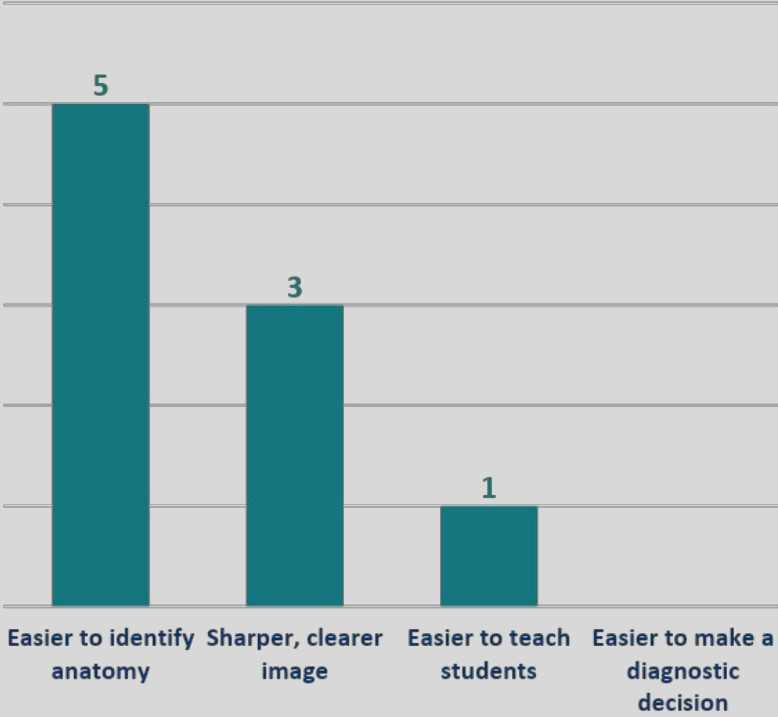
Clarius PAL-HD

Top Reasons for 1st Ranked Selection



Lumify S4-1

Top Reasons for 1st Ranked Selection



Butterfly iQ3

Top Reasons for 1st Ranked Selection



Nerve Comparison

2 models were rated higher in image quality, though Butterfly iQ3 still outperformed GE VScan SL and EXO Iris.

How does each image compare to Butterfly iQ3?



Q1_7: For each image or cine clip, please indicate how it compares to the reference image.

Q4_7: Are any of the images presented unsuitable for making a diagnostic decision?

²Reference Comparison Score: Calculated where “much better than the reference”= +2 pts, “slightly better than the reference”= +1 pt., “equivalent to the reference”= 0 pts, “slightly worse than the reference”= -1 pt., and “much worse than the reference”= -2 pts. The highest sum represents the most favored image compared to the reference.

Nerve Summary

The Butterfly iQ3 is a suitable alternative to other models for nerve imaging, outperforming both the GE VScan SL and EXO Iris, and receiving no votes indicating unsuitable clinical images.

Brand Name	Nerve Rank Score*	Clinically "Unsuitable" Votes	Reference Comparison Score ²
Clarius PAL- HD	34	0	17
Lumify S4-1	34	1	9
Butterfly iQ3	25	0	Reference image
GE VScan SL	16	1	-1
EXO Iris	11	0	-3



Preset 8: OB

OB Rank

The GE VScan CL had the highest overall rank for the OB Videos, followed by the EXO Iris and Lumify C5-2.

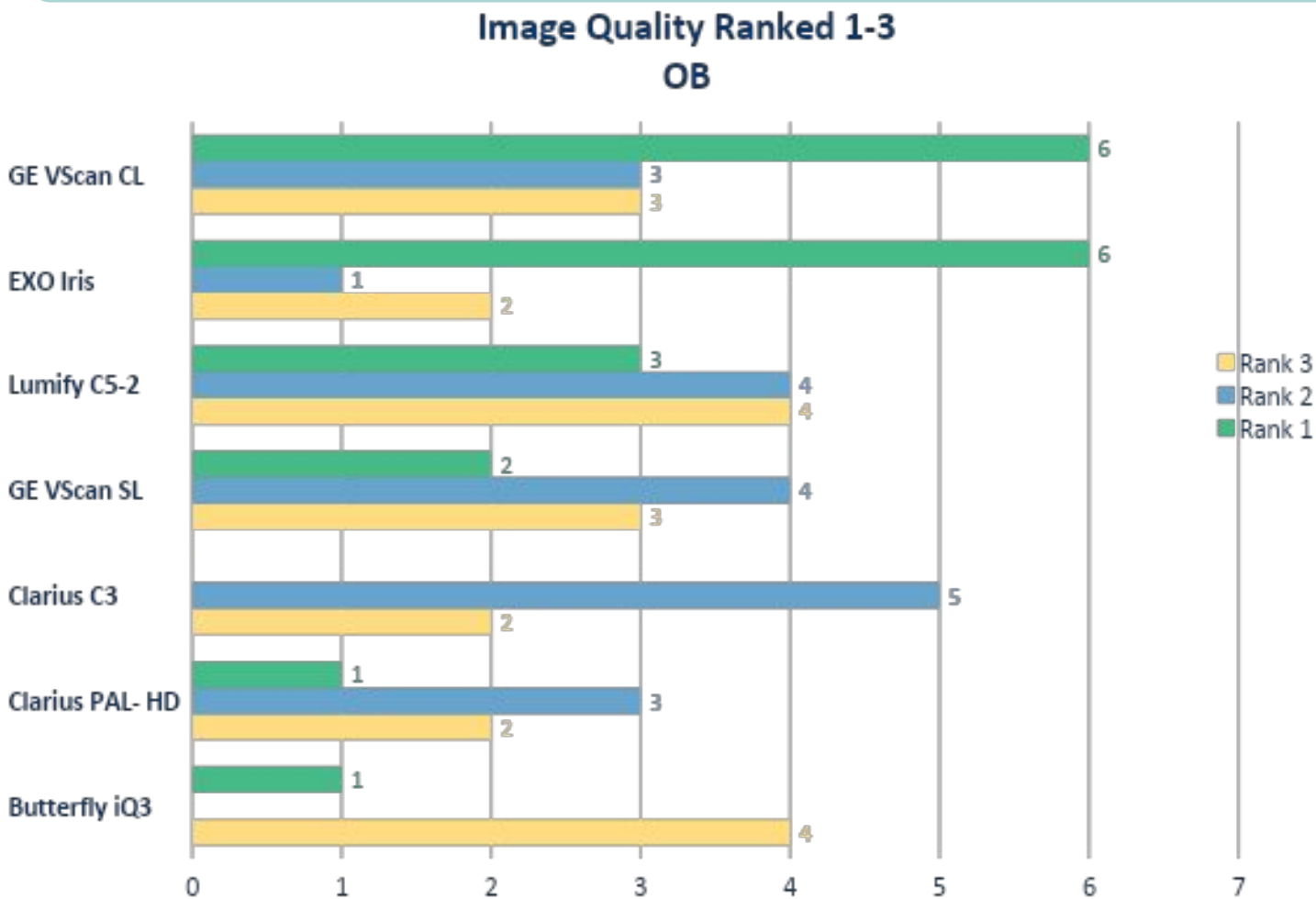


Image Brand	Rank Score ¹
GE VScan CL	27
EXO Iris	22
Lumify C5-2	21
GE VScan SL	17
Clarius C3	12
Clarius PAL- HD	11
Butterfly iQ3	7

Q2_8: For each image preset (e.g., cardiac, abdominal, lung, etc.), please rank your top 3 clips or images in order of preference (1 = best)
¹Rank Score: Calculated where Rank 1=3pts, Rank 2=2pts, and Rank 3=1pt. The highest sum represents the most ranked overall image brand.

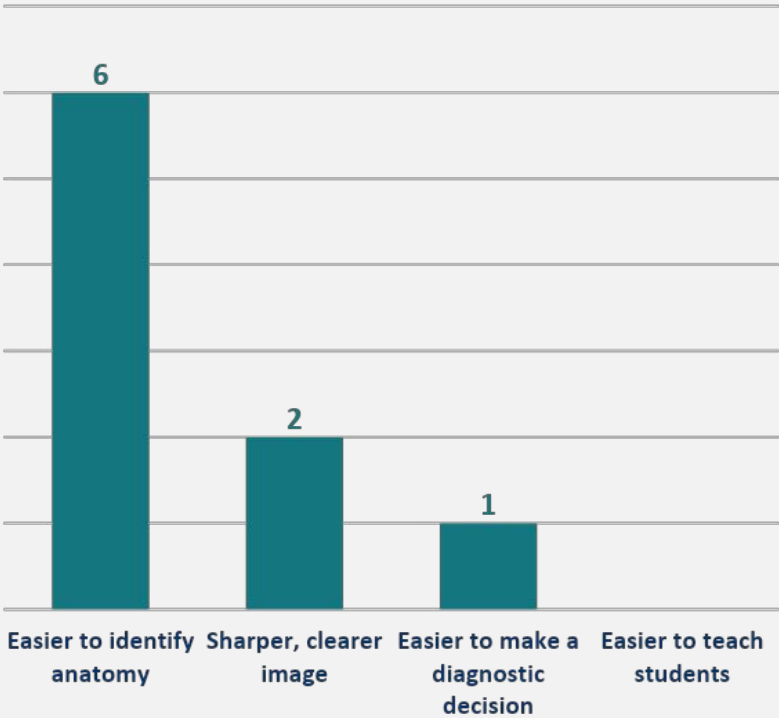
OB Reasons for Selection

The GE VScan CL and Lumify C5-2 were both ranked 1st due to their ‘easier to identify anatomy’, while those that ranked the EXO Iris first did so due to the ‘sharper, clearer image’.



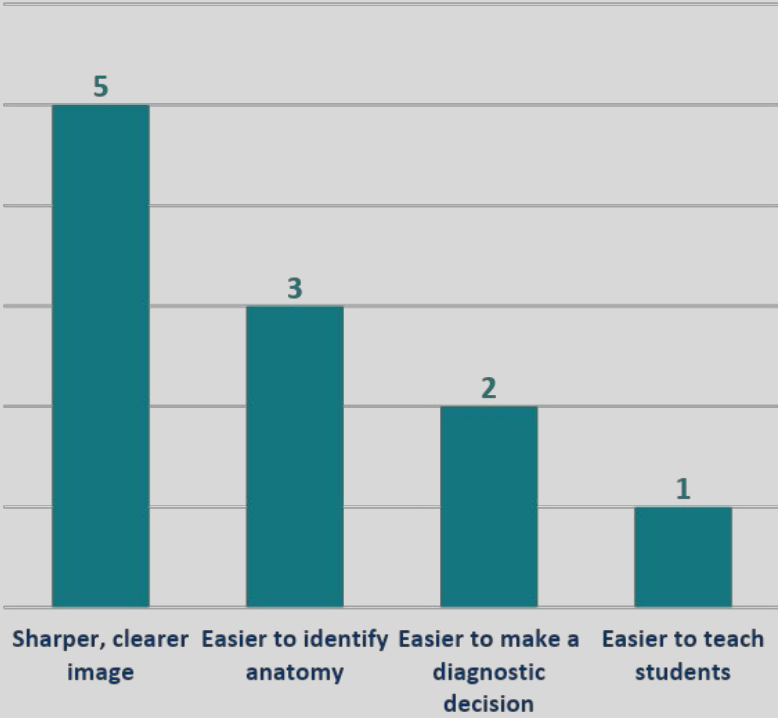
GE VScan CL

Top Reasons for 1st Ranked Selection



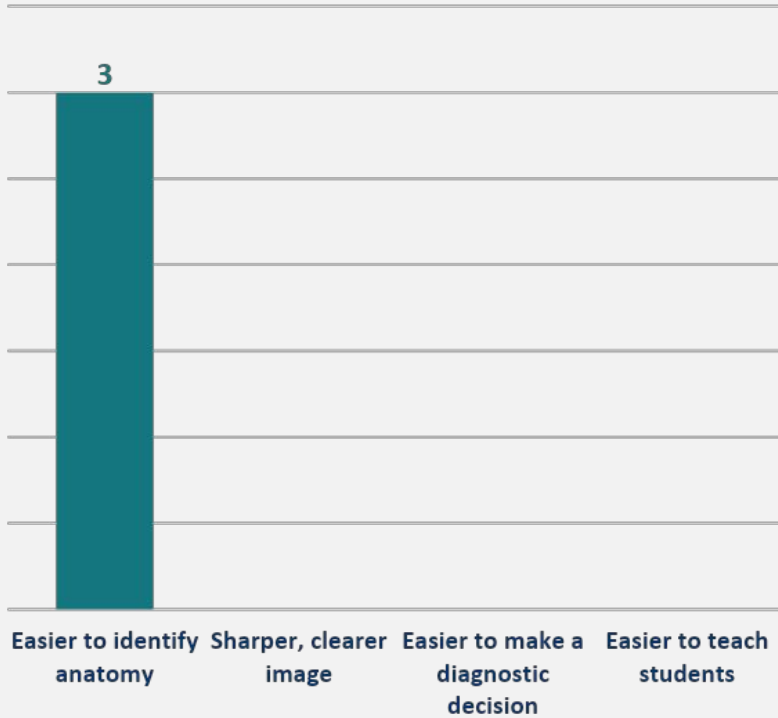
EXO Iris

Top Reasons for 1st Ranked Selection



Lumify C5-2

Top Reasons for 1st Ranked Selection



OB Comparison

Butterfly iQ3 served as a solid reference point for OB imaging, with only GE VScan CL scoring notably higher, while most other devices delivered comparable or lower image quality.

How does each image compare to Butterfly iQ3?



Q1_8: For each image or cine clip, please indicate how it compares to the reference image.

Q4_8: Are any of the images presented unsuitable for making a diagnostic decision?

²Reference Comparison Score: Calculated where “much better than the reference”= +2 pts, “slightly better than the reference”= +1 pt., “equivalent to the reference”= 0 pts, “slightly worse than the reference”= -1 pt., and “much worse than the reference”= -2 pts. The highest sum represents the most favored image compared to the reference.

OB Summary

Butterfly iQ3 is a suitable alternative to the other models for OB images with only 1 vote indicating unsuitable clinical images.

Brand Name	OB Rank Score*	Clinically "Unsuitable" Votes	Reference Comparison Score ²
GE VScan CL	27	0	11
EXO Iris	22	0	3
Lumify C5-2	21	0	5
GE VScan SL	17	2	3
Clarius C3	12	2	-6
Clarius PAL- HD	11	1	-1
Butterfly iQ3	7	1	Reference video



Preset 9: Ophthalmic

Ophthalmic Rank

The GE VScan SL had the highest overall rank for the ophthalmic image followed by the Clarius PAL-HD.

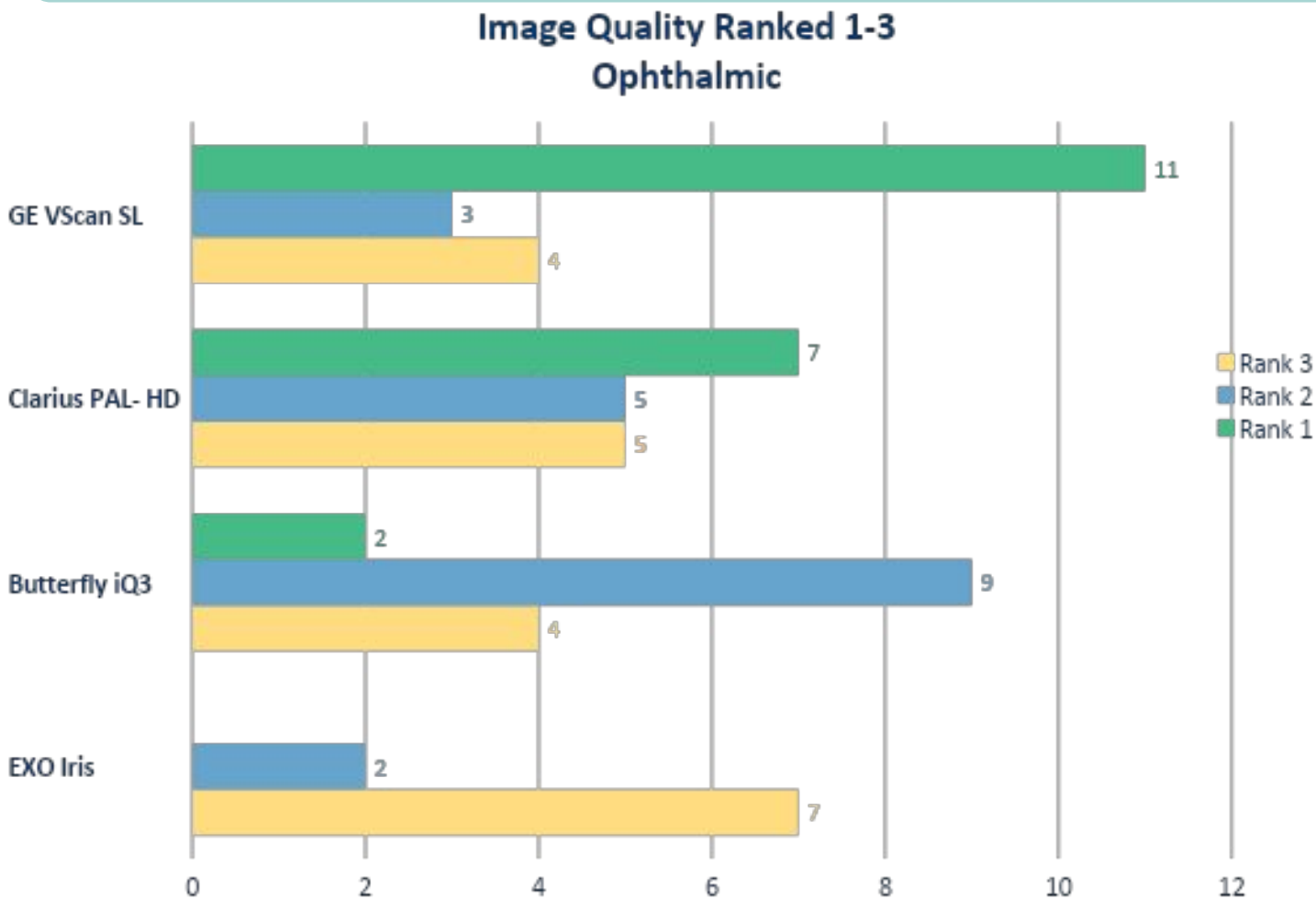


Image Brand	Rank Score ¹
GE VScan SL	43
Clarius PAL- HD	36
Butterfly iQ3	28
EXO Iris	11

Q2_9: For each image preset (e.g., cardiac, abdominal, lung, etc.), please rank your top 3 clips or images in order of preference (1 = best)
¹Rank Score: Calculated where Rank 1=3pts, Rank 2=2pts, and Rank 3=1pt. The highest sum represents the most ranked overall image brand.

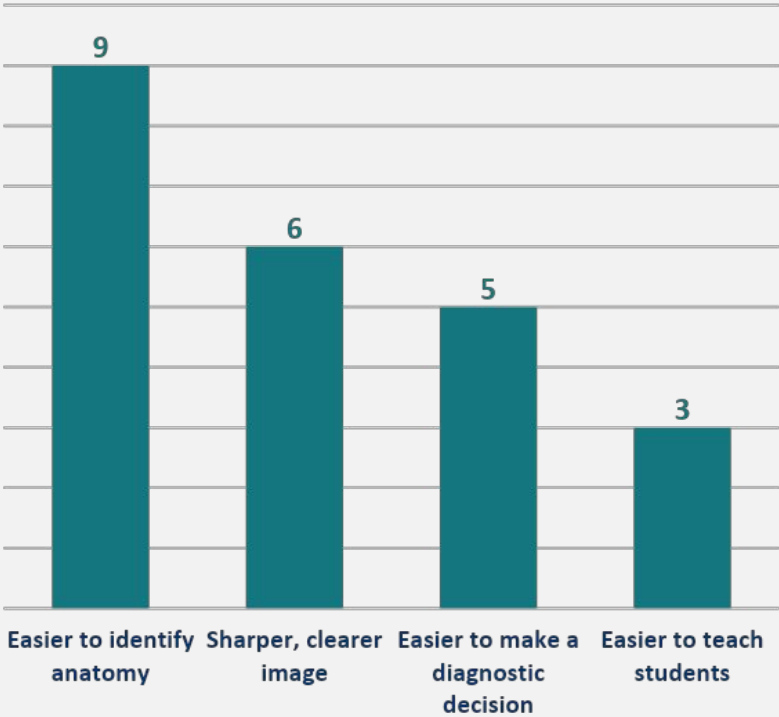
Ophthalmic Reasons for Selection

The GE VScan SL and Clarius PAL-HD were ranked 1st by respondents due to 'easier to identify anatomy' followed by 'sharper, clearer image'.



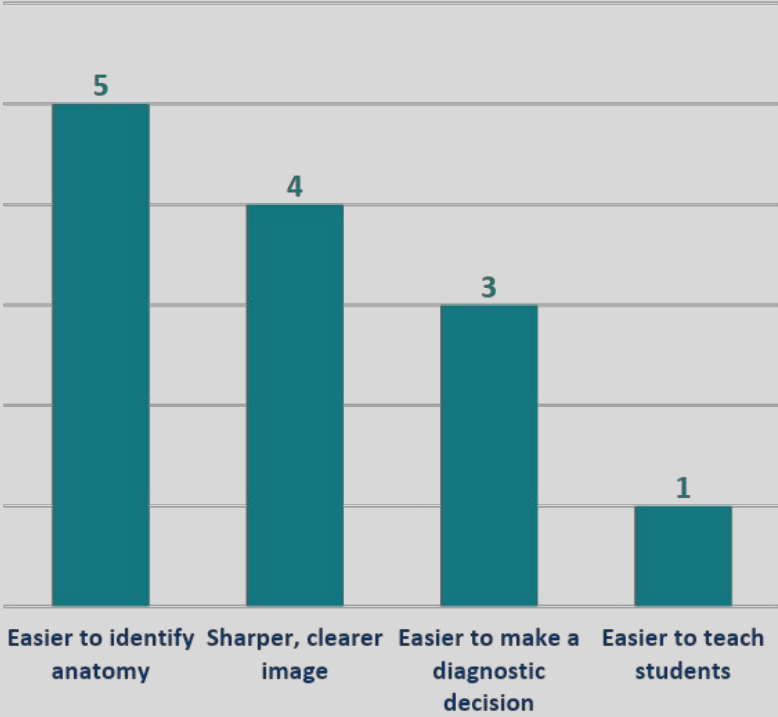
GE VScan SL

Top Reasons for 1st Ranked Selection



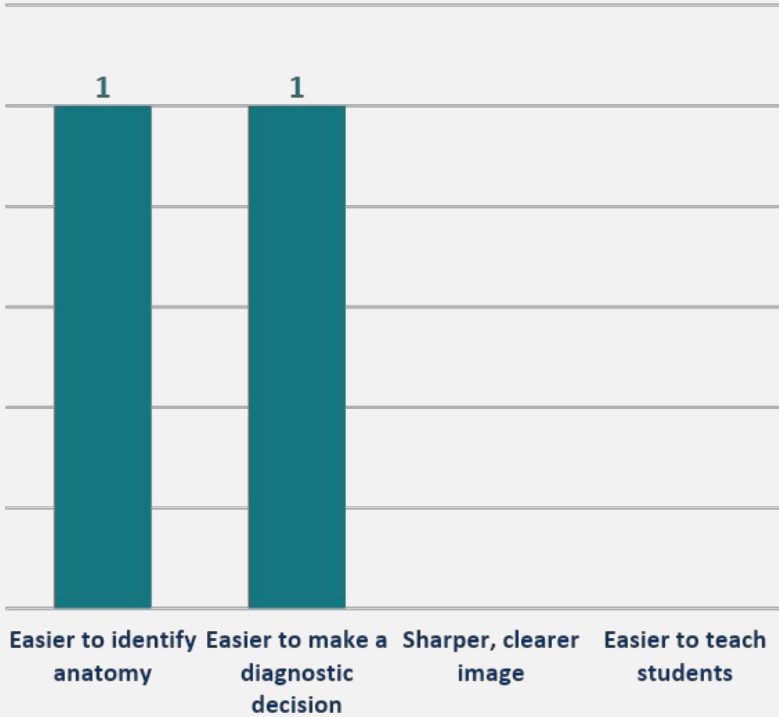
Clarius PAL-HD

Top Reasons for 1st Ranked Selection



Butterfly iQ3

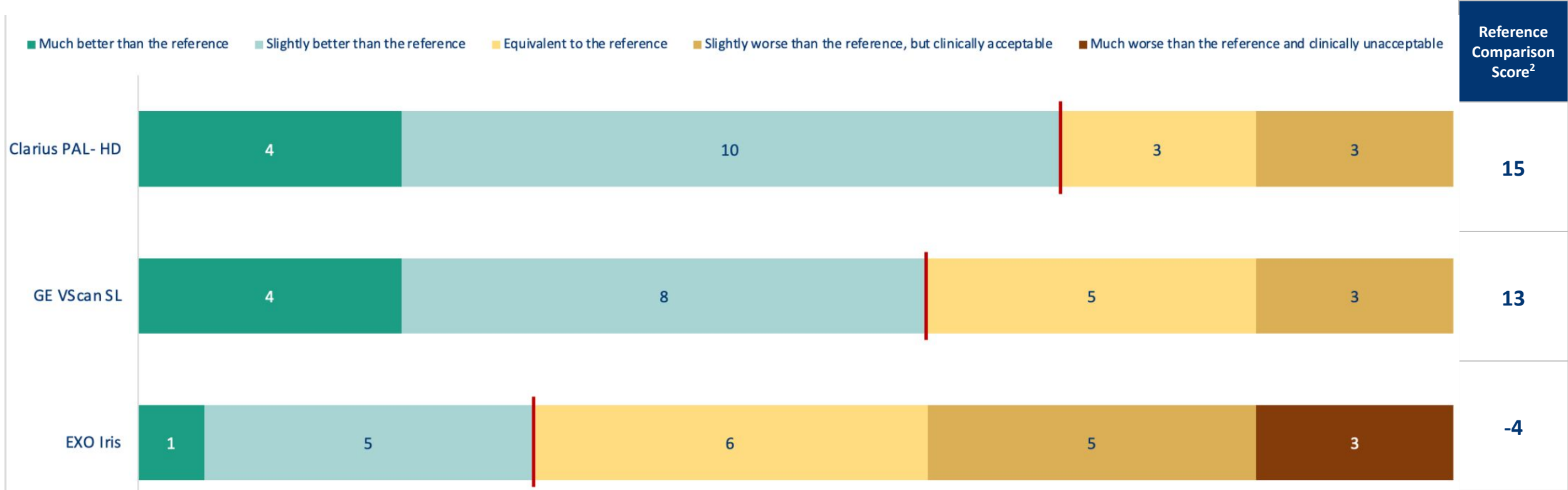
Top Reasons for 1st Ranked Selection



Ophthalmic Comparison

Butterfly iQ3 was outperformed in Ophthalmic imaging by Clarius PAL-HD and GE VScan SL who received higher overall image quality scores.

How does each image compare to Butterfly iQ3?



Q1_9: For each image or cine clip, please indicate how it compares to the reference image.

Q4_9: Are any of the images presented unsuitable for making a diagnostic decision?

²Reference Comparison Score: Calculated where “much better than the reference”= +2 pts, “slightly better than the reference”= +1 pt., “equivalent to the reference”= 0 pts, “slightly worse than the reference”= -1 pt., and “much worse than the reference”= -2 pts. The highest sum represents the most favored image compared to the reference.

Ophthalmic Summary

Butterfly iQ3 is a suitable alternative to the other models for ophthalmic images with no votes indicating unsuitable clinical images.

Brand Name	Ophthalmic Rank Score*	Clinically "Unsuitable" Votes	Reference Comparison Score ²
GE VScan SL	43	0	15
Clarius PAL- HD	36	0	13
Butterfly iQ3	28	0	Reference image
EXO Iris	11	2	-4

¹**Rank Score:** Calculated where Rank 1=3pts, Rank 2=2pts, and Rank 3=1pt. The highest sum represents the most ranked overall image brand.
²**Reference Comparison Score:** Calculated where "much better than the reference"= +2 pts, "slightly better than the reference"= +1 pt., "equivalent to the reference"= 0 pts, "slightly worse than the reference"= -1 pt., and "much worse than the reference"= -2 pts. The highest sum represents the most favored image compared to the reference.



Preset 10: Small Organ

Small Organ Rank

For the small organ images, the Lumify S4-1 was ranked highest overall while the Clarius PAL-HD was ranked lowest.

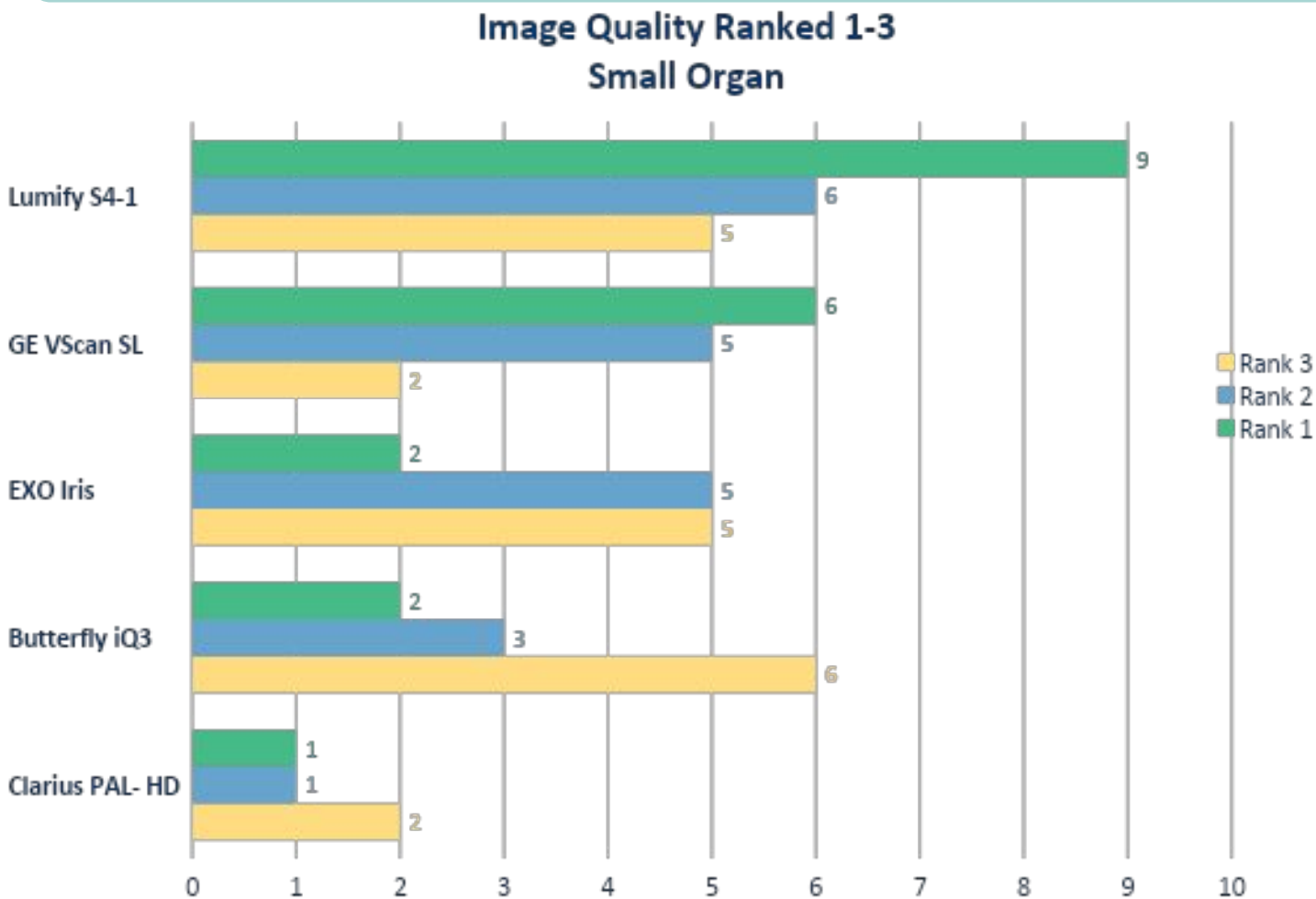


Image Brand	Rank Score ¹
Lumify S4-1	44
GE VScan SL	30
EXO Iris	21
Butterfly iQ3	18
Clarius PAL- HD	7

Q2_10: For each image preset (e.g., cardiac, abdominal, lung, etc.), please rank your top 3 clips or images in order of preference (1 = best)
¹Rank Score: Calculated where Rank 1=3pts, Rank 2=2pts, and Rank 3=1pt. The highest sum represents the most ranked overall image brand.

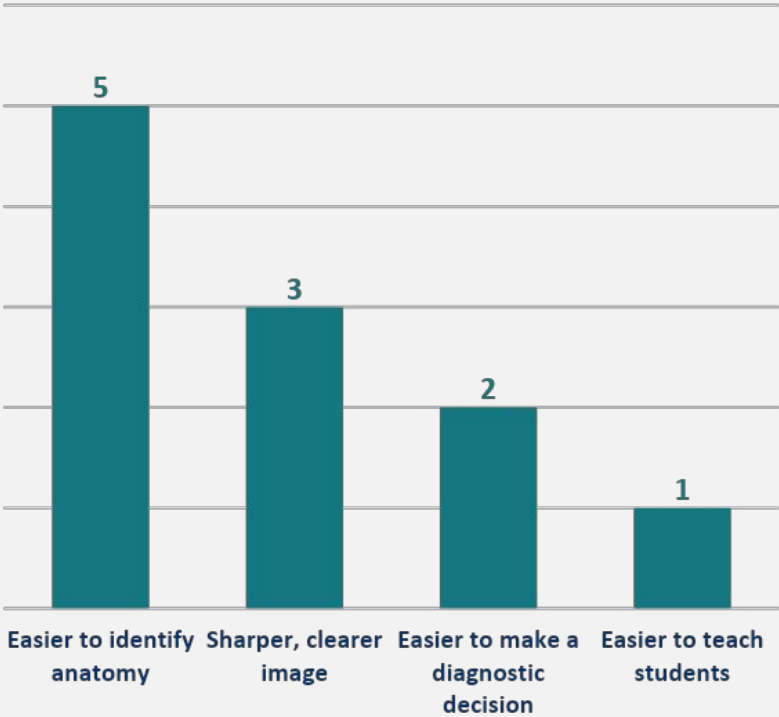
Small Organ Reasons for Selection

The Lumify S4-1 was ranked 1st by respondents due to its ‘easier to identify anatomy’, while the GE VScan SL was ranked 1st primarily due to its ‘sharper, clearer image’.



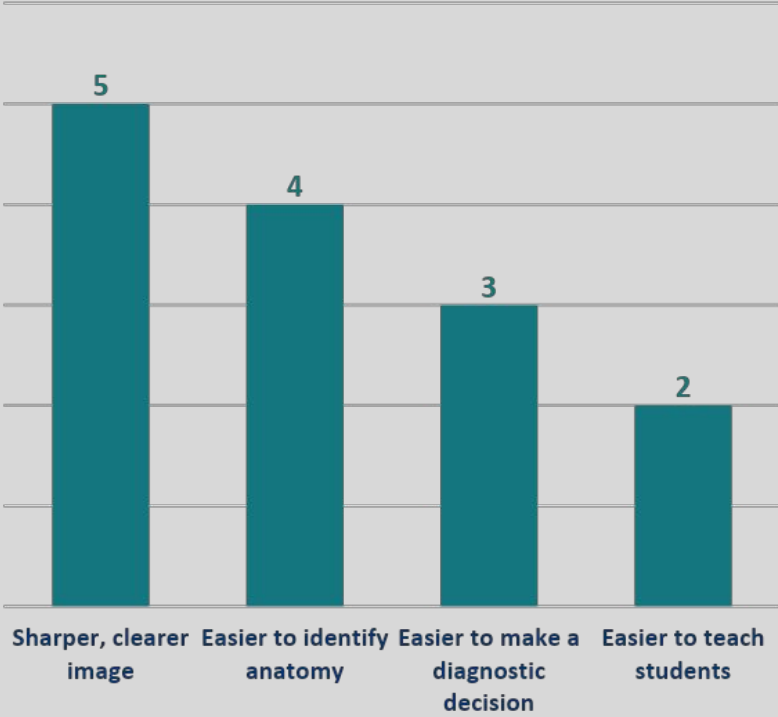
Lumify S4-1

Top Reasons for 1st Ranked Selection



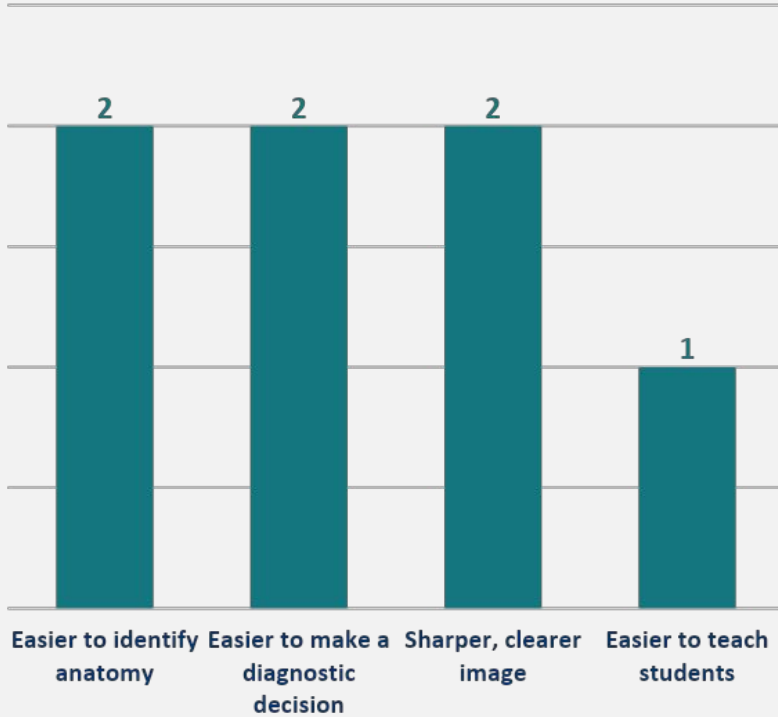
GE VScan SL

Top Reasons for 1st Ranked Selection



EXO Iris

Top Reasons for 1st Ranked Selection



Small Organ Comparison

Butterfly iQ3 was outperformed in perceived image quality by most other probe models.

How does each image compare to Butterfly iQ3?



Q1_10: For each image or cine clip, please indicate how it compares to the reference image.

Q4_10: Are any of the images presented unsuitable for making a diagnostic decision?

²Reference Comparison Score: Calculated where “much better than the reference”= +2 pts, “slightly better than the reference”= +1 pt., “equivalent to the reference”= 0 pts, “slightly worse than the reference”= -1 pt., and “much worse than the reference”= -2 pts. The highest sum represents the most favored image compared to the reference.

Small Organ Summary

Butterfly iQ3 is a suitable alternative to the other models for small organ images with only 1 vote indicating unsuitable clinical images.

Brand Name	Small Organ Rank Score*	Clinically "Unsuitable" Votes	Reference Comparison Score ²
Lumify S4-1	44	0	14
GE VScan SL	30	0	11
EXO Iris	21	1	10
Butterfly iQ3	18	1	Reference image
Clarius PAL- HD	7	2	-5



Preset 11: Carotid

Carotid Rank

The GE VScan SL had the highest rank score followed by the Lumify S4-1 in 2nd. The **Butterfly iQ3** came in 3d place.

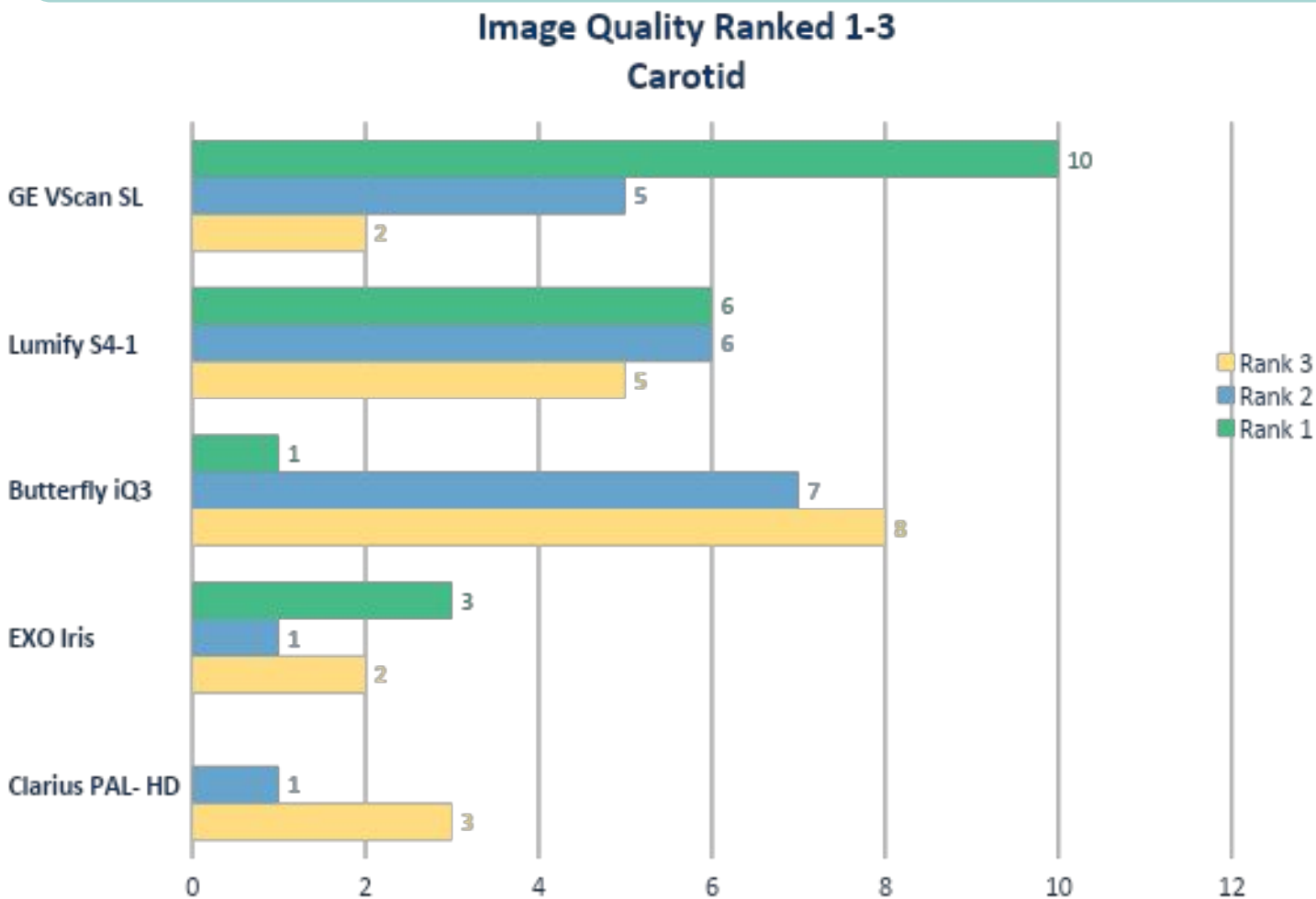


Image Brand	Rank Score ¹
GE VScan SL	42
Lumify S4-1	35
Butterfly iQ3	25
EXO Iris	13
Clarius PAL- HD	5

Q2_11: For each image preset (e.g., cardiac, abdominal, lung, etc.), please rank your top 3 clips or images in order of preference (1 = best)
¹Rank Score: Calculated where Rank 1=3pts, Rank 2=2pts, and Rank 3=1pt. The highest sum represents the most ranked overall image brand.

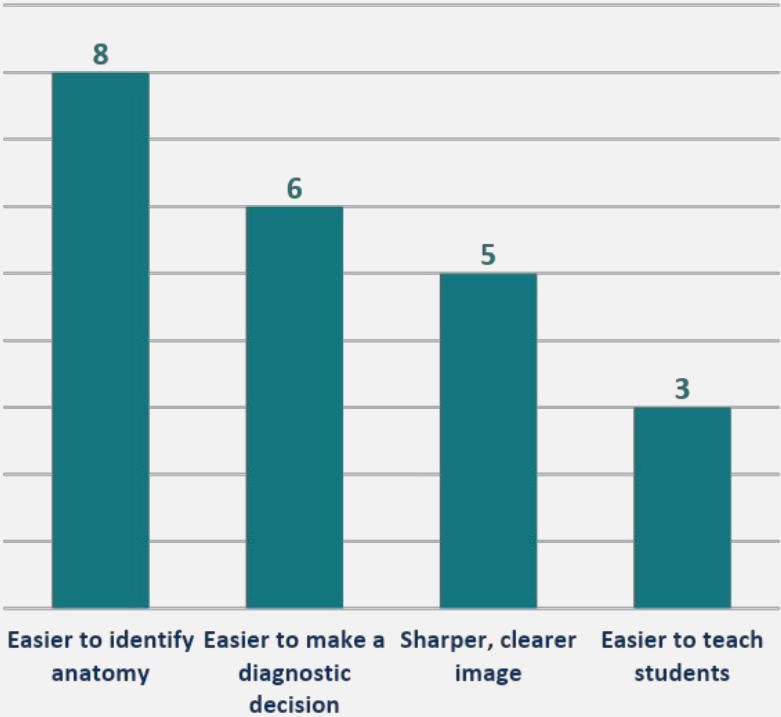
Carotid Reasons for Selection

The GE VScan SL and Lumify S4-1 were ranked 1st primarily due to ‘easier to identify anatomy’. Additionally, many thought the GE VScan SL image was ‘easier to make a diagnostic decision’.



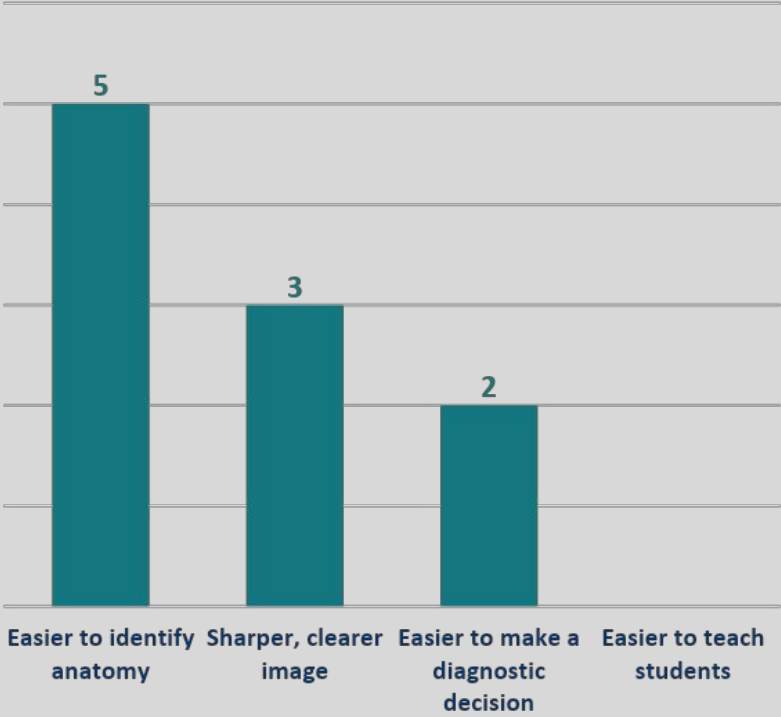
GE VScan SL

Top Reasons for 1st Ranked Selection



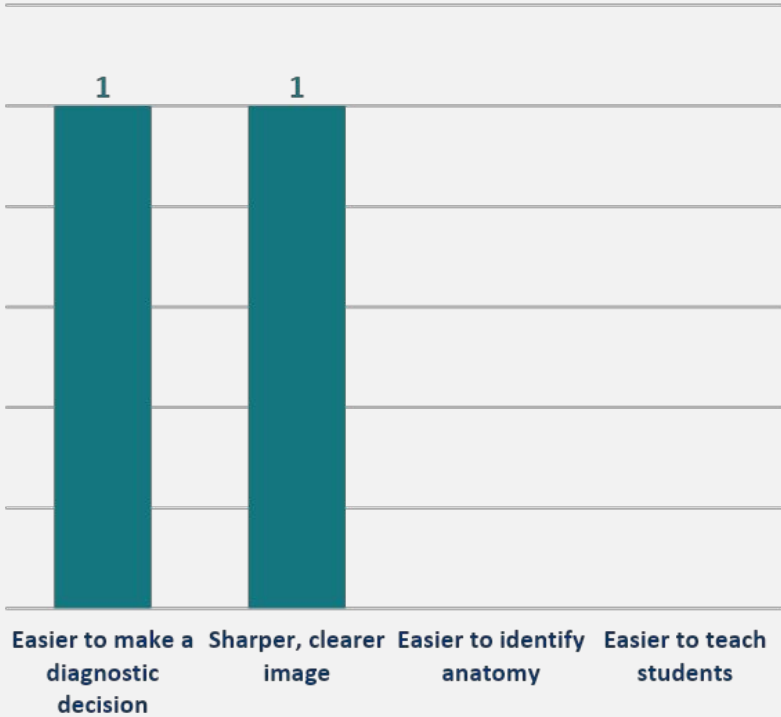
Lumify S4-1

Top Reasons for 1st Ranked Selection



Butterfly iQ3

Top Reasons for 1st Ranked Selection



Carotid Comparison

The GE VScan SL received no “slightly worse” or “much worse” ratings when compared to the reference, yielding the highest comparison score of the Carotid images.

How does each image compare to Butterfly iQ3?



Q1_11: For each image or cine clip, please indicate how it compares to the reference image.

Q4_11: Are any of the images presented unsuitable for making a diagnostic decision?

²Reference Comparison Score: Calculated where “much better than the reference”= +2 pts, “slightly better than the reference”= +1 pt., “equivalent to the reference”= 0 pts, “slightly worse than the reference”= -1 pt., and “much worse than the reference”= -2 pts. The highest sum represents the most favored image compared to the reference.

Carotid Summary

Butterfly iQ3 is a suitable alternative to the other models for carotid images, performing in the mid-tier of rank scores and with no votes indicating unsuitable clinical images.

Brand Name	Carotid Rank Score*	Clinically "Unsuitable" Votes	Reference Comparison Score ²
GE VScan SL	42	0	23
Lumify S4-1	35	0	13
Butterfly iQ3	25	0	Reference image
EXO Iris	13	1	-10
Clarius PAL- HD	5	2	3



Preset 12: Deep Vein

Deep Vein Rank

The GE VScan SL had the highest rank score of the deep vein images followed by the EXO Iris.

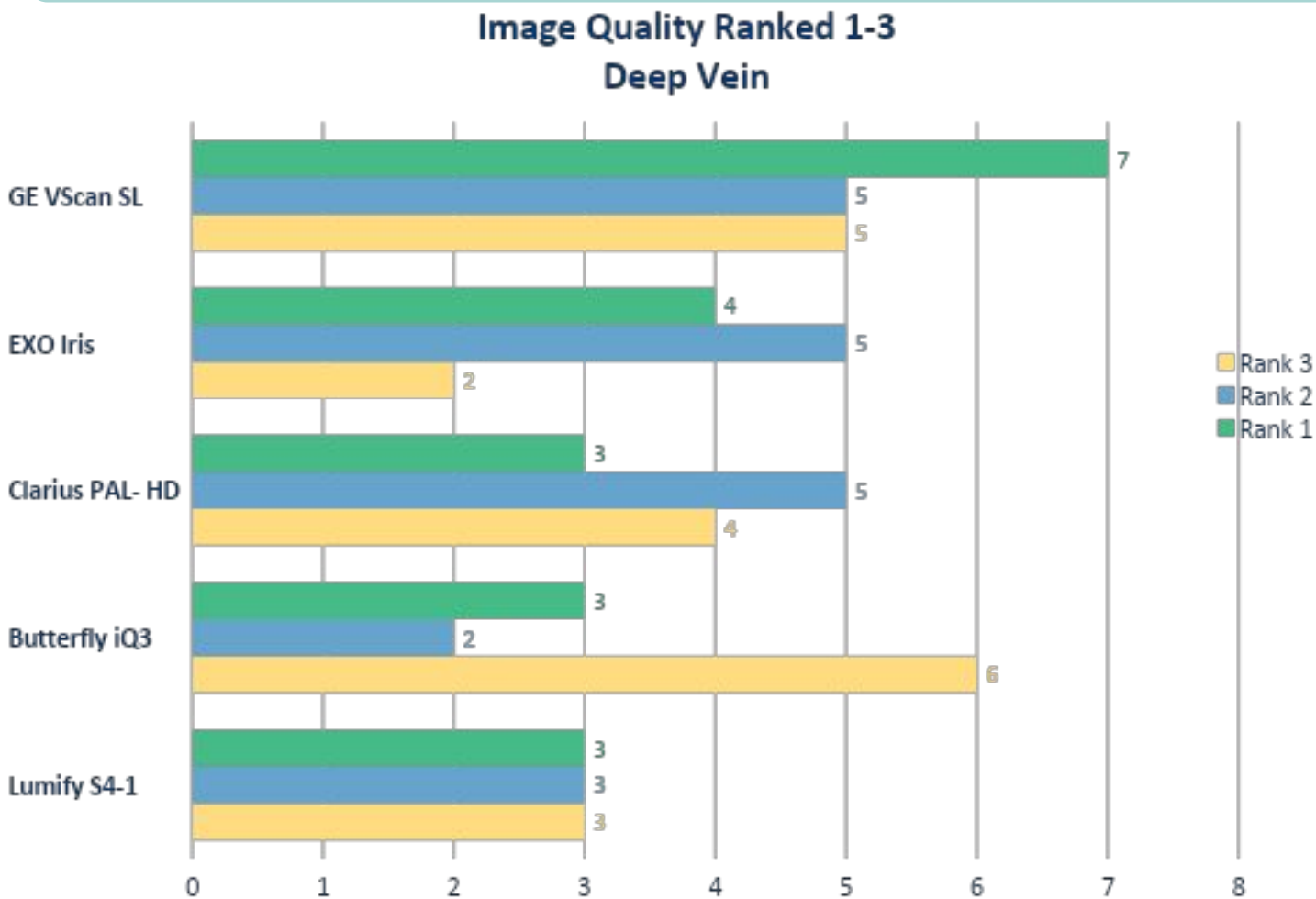


Image Brand	Rank Score ¹
GE VScan SL	36
EXO Iris	24
Clarius PAL- HD	23
Butterfly iQ3	19
Lumify S4-1	18

Q2_12: For each image preset (e.g., cardiac, abdominal, lung, etc.), please rank your top 3 clips or images in order of preference (1 = best)
¹Rank Score: Calculated where Rank 1=3pts, Rank 2=2pts, and Rank 3=1pt. The highest sum represents the most ranked overall image brand.

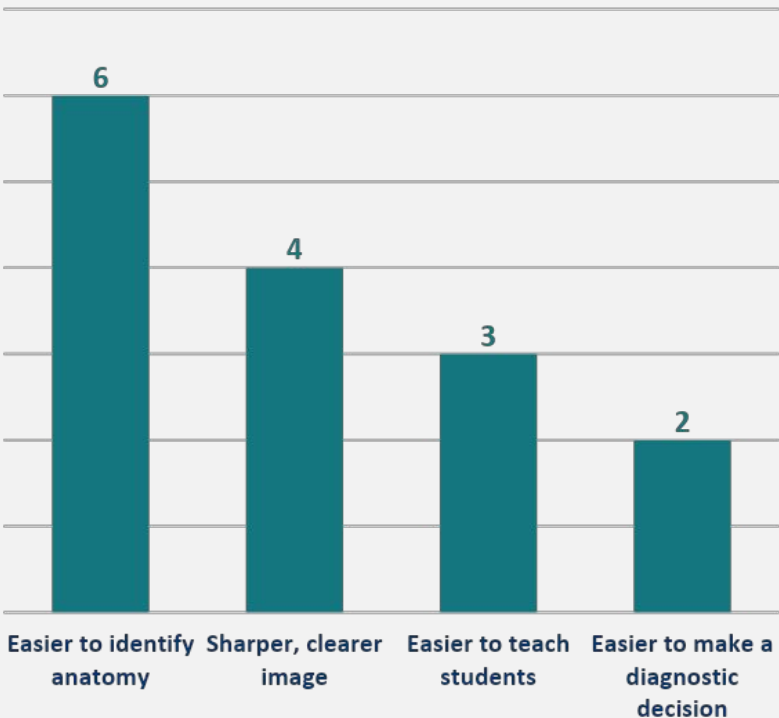
Deep Vein Reasons for Selection

The GE VScan SL and Clarius PAL-HD were ranked 1st primarily for their 'easier to identify anatomy', while the EXO Iris was ranked 1st due to its 'sharper, clearer image'.



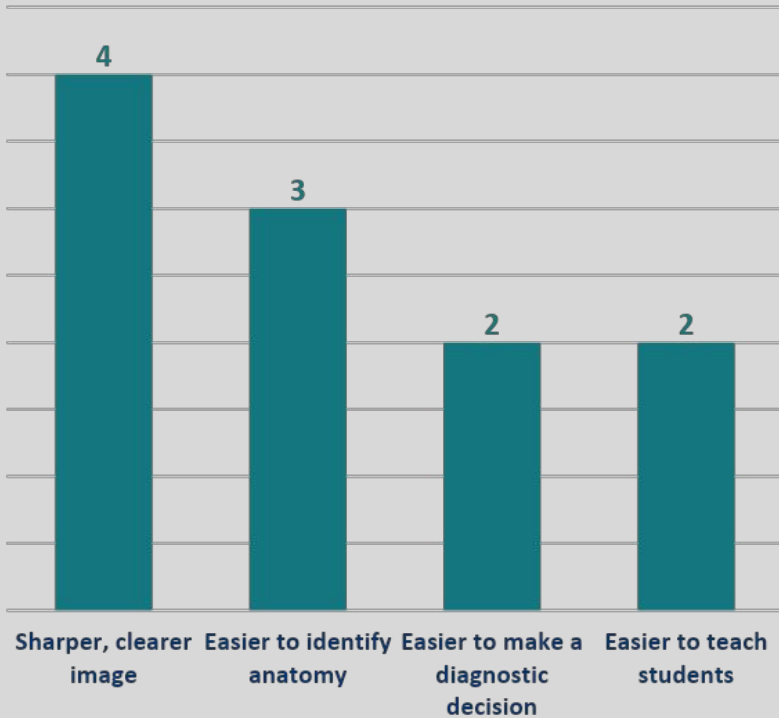
GE VScan SL

Top Reasons for 1st Ranked Selection



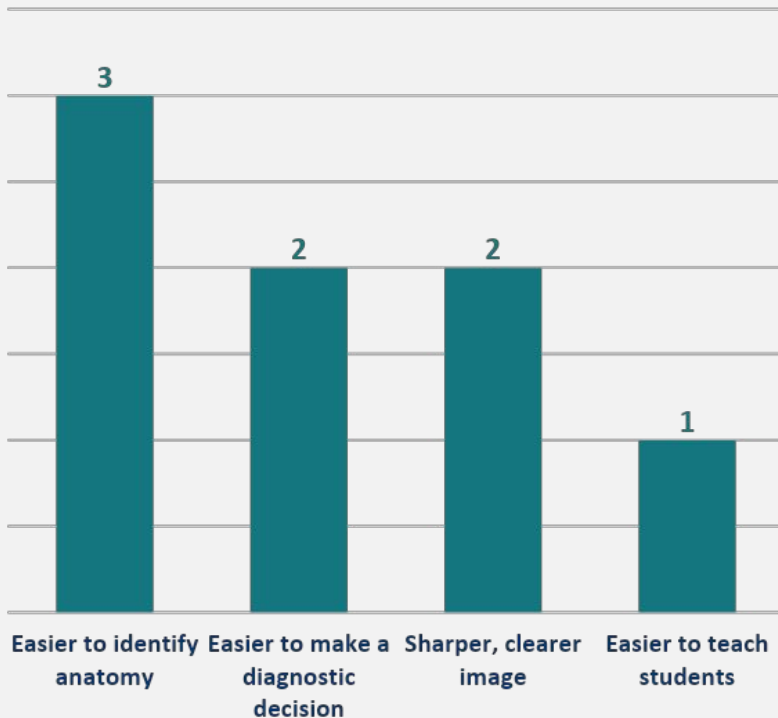
EXO Iris

Top Reasons for 1st Ranked Selection



Clarius PAL-HD

Top Reasons for 1st Ranked Selection



Deep Vein Comparison

Butterfly iQ3 was consistently outscored across all devices in this comparison, with GE VScan SL achieving the highest overall image quality rating

How does each image compare to Butterfly iQ3?



Q1_12: For each image or cine clip, please indicate how it compares to the reference image.

Q4_12: Are any of the images presented unsuitable for making a diagnostic decision?

²Reference Comparison Score: Calculated where "much better than the reference"= +2 pts, "slightly better than the reference"= +1 pt., "equivalent to the reference"= 0 pts, "slightly worse than the reference"= -1 pt., and "much worse than the reference"= -2 pts. The highest sum represents the most favored image compared to the reference.

Deep Vein Summary

Butterfly iQ3 remains a suitable alternative to the other models for deep vein images with no votes indicating unsuitable clinical images.

Brand Name	Deep Vein Rank Score*	Clinically "Unsuitable" Votes	Reference Comparison Score ²
GE VScan SL	36	0	21
EXO Iris	24	0	11
Clarius PAL- HD	23	0	15
Butterfly iQ3	19	0	Reference image
Lumify S4-1	18	0	11

¹**Rank Score:** Calculated where Rank 1=3pts, Rank 2=2pts, and Rank 3=1pt. The highest sum represents the most ranked overall image brand.
²**Reference Comparison Score:** Calculated where “much better than the reference”= +2 pts, “slightly better than the reference”= +1 pt., “equivalent to the reference”= 0 pts, “slightly worse than the reference”= -1 pt., and “much worse than the reference”= -2 pts. The highest sum represents the most favored image compared to the reference.