

Reliability Report December 2022

IMPLANTABLE COCHLEAR STIMULATORS AND SOUND PROCESSORS

POWERFUL CONNECTIONS





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AN UPDATE FROM THE PRESIDENT OF ADVANCED BIONICS

Advanced Bionics has had a more than 25-year dedication to innovation which has brought sound to over 140,000 ears in 135 countries. As the President of AB, I am honored to lead further development by implementing new standards of reliability, including rigorous quality testing of products exceeding the international standards, and the development of new tests which simulate accelerated aging to reveal how the implant will perform in the human body over decades.

Fully transparent communication with the cochlear implant community is an ongoing commitment from the AB team and me. We continue to share reliability on all AB implants and current sound processors semi-annually using reporting methodologies recommended by both the International Organization for Standardization in ISO 5841-2:2014,¹ the principles outlined in the European Consensus on Cochlear Implant Failures and Explanations,² and ANSI/AAMI CI86: (2017) Cochlear Implant Systems: Requirements for Safety, Functional Verification, Labeling and Reliability Reporting.³ Additionally, we share quarterly updates through our sales force, providing reassurance to you and your patients.

Today, AB continues transparent communication by presenting the December 2022 Reliability Report. The HiRes™ Ultra 3D V2, our flagship cochlear implant, demonstrates the highest reliability in our history with a combined adult and pediatric Cumulative Survival Rate (CSR) of 99.97% at two years. Combining the technology of this implant with the advanced sound processing and universal connectivity of Marvel CI, AB is providing patients with highly reliable and innovative hearing products.

I am honored to lead this remarkable company by fostering the development of innovative and durable technology that will improve the lives of people with hearing loss around the globe.

Victoria E. Carr-Brendel, Ph.D. PRESIDENT, ADVANCED BIONICS

^{1.} ISO 5841-2 (2014) Implants for Surgery - Cardiac Pacemakers. International Organization for Standardization (ISO), Geneva, Switzerland.

^{2.} European Consensus Statement on Cochlear Implant Failures and Explanations. (2005) Otology and Neurology, 26(6): 1097-1099.

^{3.} ANSI/AAMI Cl86. Cochlear Implant Systems: Requirements for Safety, Functional Verification, Labeling and Reliability Reporting. (2017). Arlington, VA: American National Standards Institute.



INTERPRETING TABLES AND GRAPHS

IMPLANTABLE COCHLEAR STIMULATORS

Number of registered HiRes Ultra 3D V2 implants

As of October 1, 2022.

Date of first commercial introduction: 2019.^a

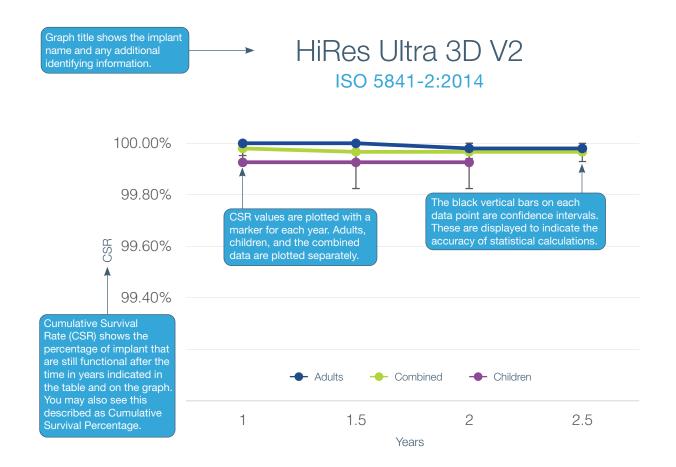
 STANDARD
 ADULTS
 CHILDREN
 COMBINED

 ISO 5841-2:2014
 10196
 3917
 14873b

 ANSI/AAMI CI86
 11629c
 3244
 14873

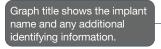
Number of registered users is detailed for adults, children (defined as less than 18 years at implantation by ISO 5841, and less than 10 years at implantation by Cl86), and a combination of all ages in accordance with reporting methodologies.

- a. Dates provided are those for major markets covered by FDA and TUV regulation. Some implants may be pending approval in a subset of additional regions.
- b. The combined number also includes any registered users for whom we do not have date of birth information.
- c. The adult number also includes users whose personal information is not available or may not be obtainable due to certain privacy laws in certain countries.

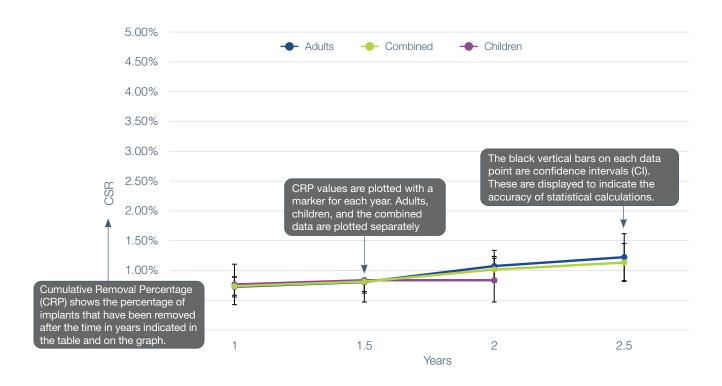


Years in use	1	1.5	2	2.5	Detailed CSR percentages
ADULTS	100.00%	100.00%	99.98%	99.98%	are shown for each year in the table. Results are
COMBINED	99.98%	99.97%	99.97%	99.97%	shown as: adult, children
CHILDREN	99.93%	99.93%	99.93%	N/A*	and combined total.

^{*}Sample size is not large enough at 2.5 years (<200 implants)



HiRes Ultra 3D V2 ANSI/AAMI CI86 STANDARD



The ANSI/AAMI Cl86 Standard requires that all removed devices are classified into three categories based on the rationale for explantation: device failure, medical reason, or inconclusive.

COMBINED ADULT AND CHILDREN

Year	Medical CRP	Device CRP	Inconclusive CRP	Total All Catagories	Total		1
rear	Medical Chr	Device OnF	inconclusive Chr	Total All Categories	CI Higher	CI Lower	
1	0.72%	0.02%	0.00%	0.74%	0.89%	0.58%	
1.5	0.78%	0.03%	0.00%	0.81%	0.98%	0.65%	Detailed CRP values an
2	0.98%	0.03%	0.00%	1.02%	1.24%	0.80%	shown for each year in
2.5	1.10%	0.03%	0.00%	1.13%	1.45%	0.82%	table.

Throughout this report, we will present the date and graphs to represent the conditions for: analysis by category for adults and children; removal rates by analysis category for adults and children, and all analysis categories for adults and children combined.

Not all data may be shown alongside the graphs due to space limitations. Please see the **Appendix** at the end of the report for a complete data set.

CURRENT-GENERATION IMPLANT DATA

HIRES ULTRA 3D V2

The HiResTM Ultra 3D (V2) cochlear implant is an update to the previous HiRes Ultra 3D (V1) device. Based off the standard HiRes Ultra platform but featuring an innovative multi-magnet assembly, the HiRes Ultra 3D V2 implant allows the use of clinical MRI at 1.5T and 3T without the need for magnet removal or head-bandaging. Due to the low torque, the recipient can be expected to have a hassle free and pain free experience.

The HiRes Ultra 3D (V2) device has a Cumulative Survival Rate (CSR) of 99.96%.



Number of registered HiRes Ultra 3D V2 implants

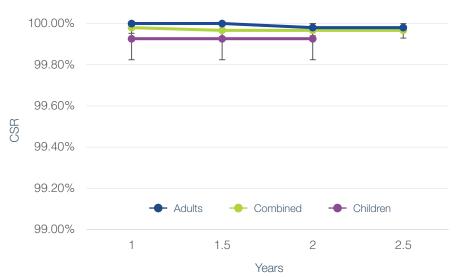
As of October 1, 2022.

Date of first commercial introduction: 2019.ª

STANDARD	ADULTS	CHILDREN	COMBINED
ISO 5841-2:2014	10196	3917	14873 ^b
ANSI/AAMI CI86	11629°	3244	14873

- a. Dates provided are those for major markets covered by FDA and TUV regulation. Some implants may be pending approval in a subset of additional regions.
- b. The combined number also includes any registered users for whom we do not have date of birth information.
- c. The adult number also includes users whose personal information is not available or may not be obtainable due to certain privacy laws in certain countries.

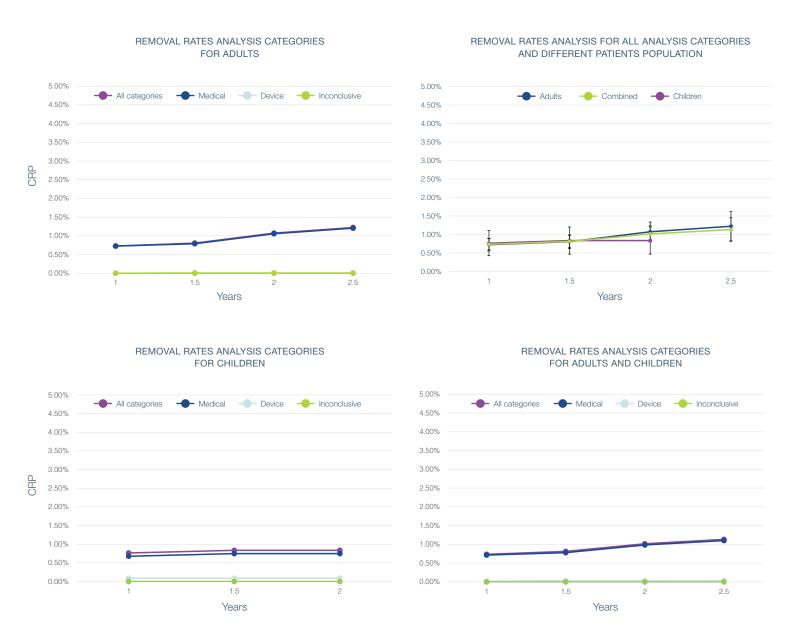
ISO 5841-2:2014



CUMULATIVE SURVIVAL PERCENTAGE

Years in use		1.5		2.5
ADULTS	100.00%	99.98%	99.98%	99.98%
COMBINED	99.98%	99.97%	99.97%	99.97%
CHILDREN	99.93%	99.93%	99.93%	N/A*

*Sample size is not large enough at 2.5 years (<200 implants)



COMBINED ADULT AND CHILDREN

Year	Medical CRP	Device CRP	Inconclusive CRP	Total All Categories	To	tal
rear	Medical Chr	Device Chr	inconclusive Chr	Total All Categories	CI Higher	CI Lower
1	0.72%	0.02%	0.00%	0.74%	0.89%	0.58%
1.5	0.78%	0.03%	0.00%	0.81%	0.98%	0.65%
2	0.98%	0.03%	0.00%	1.02%	1.24%	0.80%
2.5	1.10%	0.03%	0.00%	1.13%	1.45%	0.82%

Not all data may be shown alongside the graphs due to space limitations. Please see the **Appendix** at the end of the report for a complete data set.

HIRES ULTRA V2

Featuring the proven performance platform as the HiRes 90K[™] Advantage, the HiRes Ultra (V2) offers a robust, thin, and discreet mechanical design that is suitable for adults and children.



Number of registered HiRes Ultra V2 implants

As of October 1, 2022.

Date of first commercial introduction: 2019.^a

STANDARD	ADULTS	CHILDREN	COMBINED
ISO 5841-2:2014	750	2494	4328b
ANSI/AAMI CI86	1930°	2308	4238

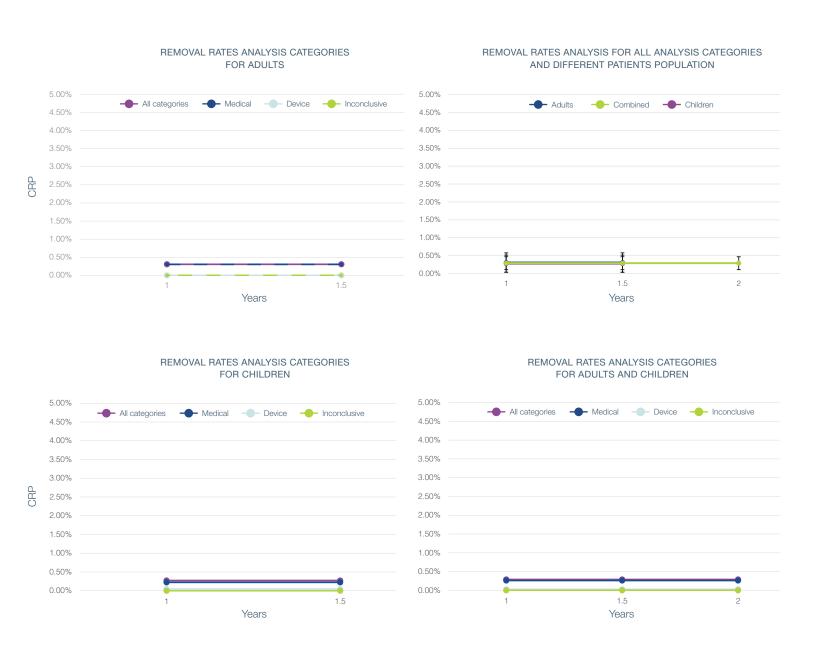
- a. Dates provided are those for major markets covered by FDA and TUV regulation. Some implants may be pending approval in a subset of additional regions.
- b. The combined number also includes any registered users for whom we do not have date of birth information.
- c. The adult number also includes users whose personal information is not available or may not be obtainable due to certain privacy laws in certain countries.

ISO 5841-2:2014



Years in use	1	1.5	2
ADULTS	100.00%	100.00%	N/A*
COMBINED	99.97%	99.97%	99.97%
CHILDREN	99.95%	99.95%	N/A*

^{*}Sample size is not large enough at 2 years (<200 implants)



COMBINED ADULTS AND CHILDREN

Year	Medical CRP	Device CRP	Inconclusive CRP	Total All Categories	То	tal
Teal	Medical Onf	Device Onr	Inconclusive One	Total All Categories	CI Higher	CI Lower
1	0.26%	0.03%	0.00%	0.29%	0.47%	0.11%
1.5	0.26%	0.03%	0.00%	0.29%	0.47%	0.11%
2	0.26%	0.03%	0.00%	0.29%	0.47%	0.11%

Not all data may be shown alongside the graphs due to space limitations. Please see the **Appendix** at the end of the report for a complete data set.

HIRES ULTRA 3D V1

The HiRes™ Ultra (V2) cochlear implant is an update to the previous HiRes Ultra (V1) device. Advanced Bionics will continue to provide regular reliability updates on the HiRes Ultra platform as new data and information becomes available.

Number of registered HiRes Ultra 3D (V1) implants

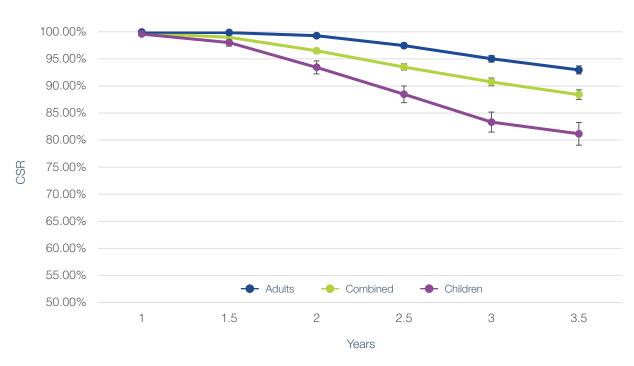
As of October 1, 2022.

Last year of distribution: subject to voluntary field action February, 2020.^a

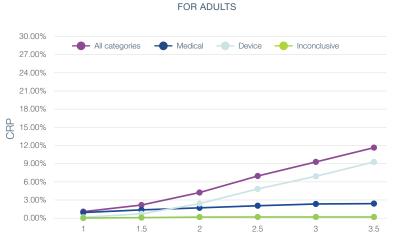
STANDARD	ADULTS	CHILDREN	COMBINED
ISO 5841-2:2014	4794	1695	6691 ^b
ANSI/AAMI CI86	5260°	1431	6691

- a. Dates provided are those for major markets covered by FDA and TUV regulation. Some implants may be pending approval in a subset of additional regions.
- b. The combined number also includes any registered users for whom we do not have date of birth information.
- c. The adult number also includes users whose personal information is not available or may not be obtainable due to certain privacy laws in certain countries.

ISO 5841-2:2014

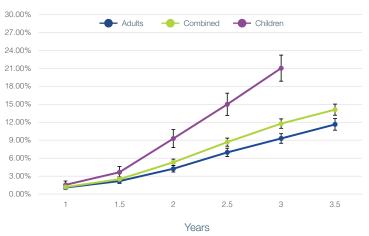


Years in use	1	1.5	2	2.5	3	3.5
ADULTS	99.94%	99.85%	99.28%	97.45%	95.02%	92.96%
COMBINED	99.79%	98.99%	96.49%	93.50%	90.74%	88.38%
CHILDREN	99.58%	98.03%	93.44%	88.45%	83.32%	81.15%



REMOVAL RATES ANALYSIS CATEGORIES

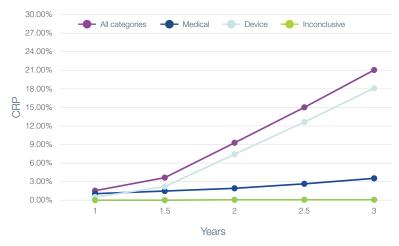
REMOVAL RATES ANALYSIS FOR ALL ANALYSIS CATEGORIES AND DIFFERENT PATIENTS POPULATION



REMOVAL RATES ANALYSIS CATEGORIES

FOR CHILDREN

Years



REMOVAL RATES ANALYSIS CATEGORIES FOR ADULTS AND CHILDREN



COMBINED ADULTS AND CHILDREN

Year	Medical CRP	Device CRP Inconclusive CRP Total All Categories		Total All Categories	То	tal
rear	iviedicai Chr	Device Chr	inconclusive Chr	Total All Categories	CI Higher	CI Lower
1	0.96%	0.21%	0.02%	1.18%	1.44%	0.92%
1.5	1.40%	1.03%	0.08%	2.49%	2.86%	2.11%
2	1.75%	3.48%	0.15%	5.31%	5.85%	4.77%
2.5	2.18%	6.48%	0.17%	8.68%	9.35%	8.00%
3	2.58%	9.28%	0.17%	11.77%	12.56%	10.98%
3.5	2.63%	11.63%	0.17%	14.10%	15.04%	13.17%

Not all data may be shown alongside the graphs due to space limitations. Please see the Appendix at the end of the report for a complete data set.

HIRES ULTRA V1

The HiRes™ Ultra (V1) cochlear implant was subject to a Voluntary Field Action initiated by Advanced Bionics in February 2020, and was withdrawn from sale worldwide. This was due to recognition of a common failure mode for a small number of devices, resulting in loss of clinical benefit. Advanced Bionics will continue to provide regular reliability updates on the HiRes Ultra platform as new data and information becomes available.

Number of registered HiRes Ultra (V1) implants

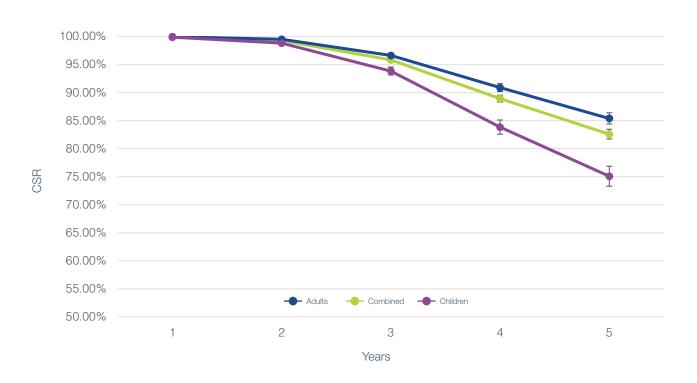
As of October 1, 2022.

Last year of distribution: subject to voluntary field action February, 2020.ª

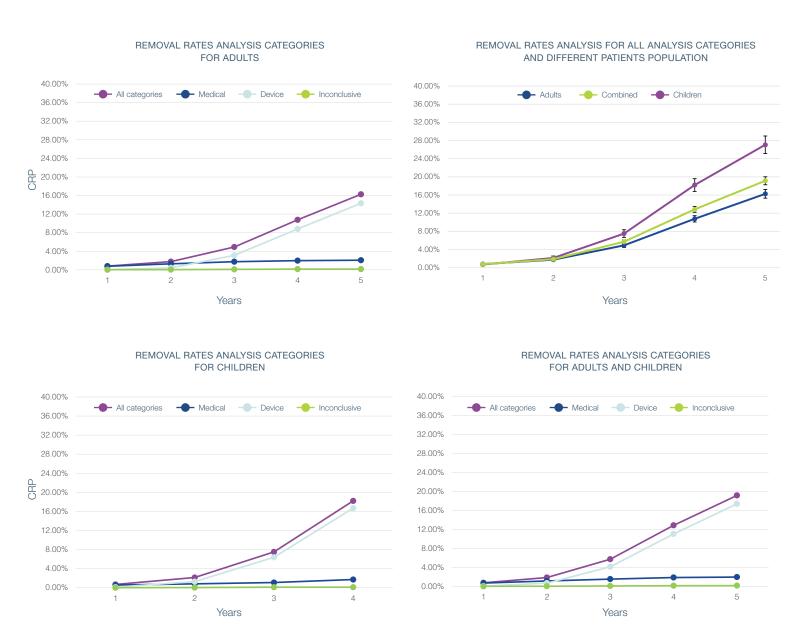
STANDARD	ADULTS	CHILDREN	COMBINED
ISO 5841-2:2014	7297	4465	12547 ^b
ANSI/AAMI CI86	8627°	3920	12547

- a. Dates provided are those for major markets covered by FDA and TUV regulation. Some implants may be pending approval in a subset of additional regions.
- b. The combined number also includes any registered users for whom we do not have date of birth information.
- c. The adult number also includes users whose personal information is not available or may not be obtainable due to certain privacy laws in certain countries.

ISO 5841-2:2014



Years in use	1	2	3	4	5
ADULTS	99.97%	99.51%	96.63%	90.89%	85.40%
COMBINED	99.94%	99.29%	95.83%	88.94%	82.59%
CHILDREN	99.89%	98.82%	93.85%	83.84%	75.07%



COMBINED ADULTS AND CHILDREN

Year	Medical CRP	Device CRP	Inconclusive CRP	Total All Categories	Total			
rear	Medical Chr	Device Chr	Inconclusive Chr	Total All Categories	CI Higher	CI Lower		
1	0.70%	0.06%	0.02%	0.77%	0.93%	0.62%		
2	1.15%	0.69%	0.05%	1.88%	2.12%	1.65%		
3	1.55%	4.14%	0.11%	5.72%	6.13%	5.31%		
4	1.88%	11.04%	0.15%	12.84%	13.48%	12.20%		
5	1.97%	17.38%	0.17%	19.15%	20.02%	18.27%		

Not all data may be shown alongside the graphs due to space limitations. Please see the **Appendix** at the end of the report for a complete data set.

HIRES 90K ADVANTAGE

The HiRes 90K[™] Advantage cochlear implant offers mechanical improvements over its predecessor, the HiRes 90K cochlear implant. It has the capability to offer advanced sound coding strategies, together with the security of a deep bone bed.

Number of registered HiRes 90K Advantage implants

As of October 1, 2022.

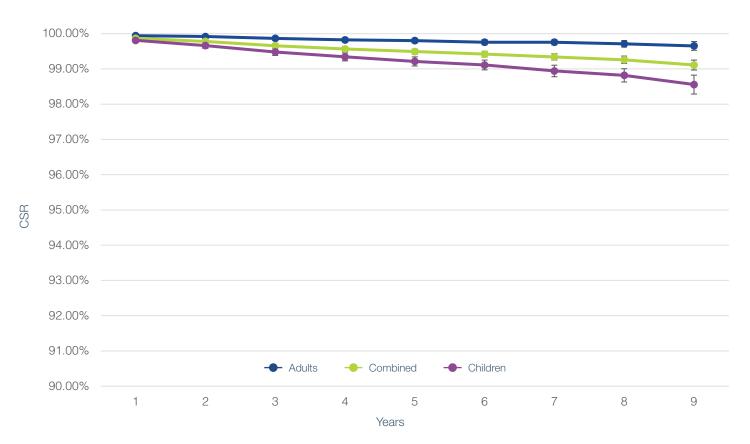
Date of first commercial introduction: 2012. Still available in selected markets.^a

STANDARD	ADULTS	CHILDREN	COMBINED
ISO 5841-2:2014	17675	21240	38915 ^b
ANSI/AAMI CI86	19870°	19045	38915



- a. Dates provided are those for major markets covered by FDA and TUV regulation. Some implants may be pending approval in a subset of additional regions.
- b. The combined number also includes any registered users for whom we do not have date of birth information.
- c. The adult number also includes users whose personal information is not available or may not be obtainable due to certain privacy laws in certain countries.

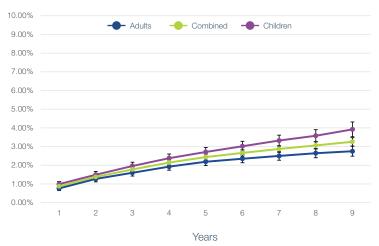
ISO 5841-2:2014



Years in use	1	2	3	4	5	6	7	8	9
ADULTS	99.94%	99.92%	99.87%	99.82%	99.80%	99.76%	99.76%	99.71%	99.65%
COMBINED	99.87%	99.78%	99.66%	99.57%	99.49%	99.42%	99.34%	99.26%	99.11%
CHILDREN	99.81%	99.66%	99.48%	99.34%	99.21%	99.11%	98.94%	98.82%	98.56%



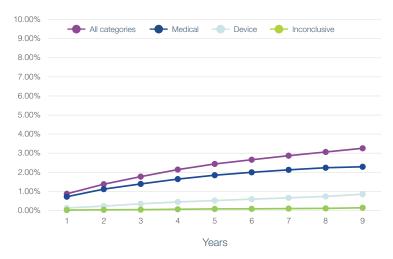
REMOVAL RATES ANALYSIS FOR ALL ANALYSIS CATEGORIES AND DIFFERENT PATIENTS POPULATION



REMOVAL RATES ANALYSIS CATEGORIES FOR CHILDREN



REMOVAL RATES ANALYSIS CATEGORIES FOR ADULTS AND CHILDREN



COMBINED ADULT AND CHILDREN

Year	Medical CRP	Device CRP	Inconclusive CRP	Total All Catagorica	Total			
rear	Medical CRP	Device CRP	inconclusive CRP	Total All Categories	CI Higher	CI Lower		
1	0.72%	0.13%	0.02%	0.87%	0.97%	0.78%		
2	1.12%	0.23%	0.03%	1.38%	1.50%	1.26%		
3	1.39%	0.35%	0.04%	1.77%	1.91%	1.64%		
4	1.65%	0.45%	0.06%	2.14%	2.29%	2.00%		
5	1.85%	0.52%	0.08%	2.44%	2.60%	2.28%		
6	2.00%	0.59%	0.08%	2.66%	2.83%	2.49%		
7	2.13%	0.66%	0.10%	2.87%	3.05%	2.69%		
8	2.24%	0.73%	0.11%	3.06%	3.26%	2.87%		
9	2.29%	0.85%	0.14%	3.26%	3.48%	3.03%		

Not all data may be shown alongside the graphs due to space limitations. Please see the **Appendix** at the end of the report for a complete data set.

HIRES 90K vendor A post-mod

The HiRes 90K[™] cochlear implant offers access to advanced sound coding technologies. It has undergone manufacturing modifications, with the version currently available being designated as the HiRes 90K (vendor A post-mod) implant.

Number of registered HiRes 90K implants (vendor A post-mod)

As of October 1, 2022.

Last year of distribution: 2018.ª

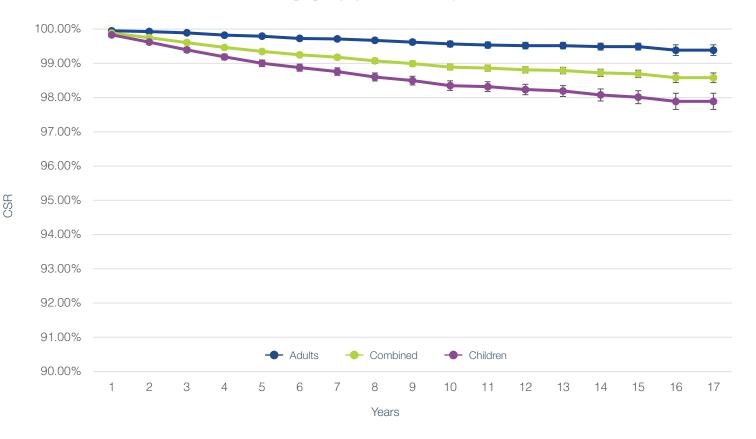
STANDARD	ADULTS	CHILDREN	COMBINED
ISO 5841-2:2014	31467	46072	77539 ^b
ANSI/AAMI CI86	39928°	40470	80398

b. The combined number also includes any registered users for whom we do not have date of birth information.



c. The adult number also includes users whose personal information is not available or may not be obtainable due to certain privacy laws in certain countries.

ISO 5841-2:2014

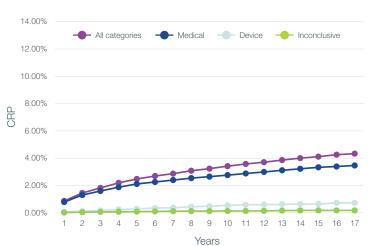


Years in use	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
ADULTS	99.95%	99.93%	99.89%	99.82%	99.79%	99.73%	99.71%	99.67%	99.62%	99.57%	99.53%	99.52%	99.52%	99.49%	99.49%	99.38%	99.38%
COMBINED	99.88%	99.75%	99.60%	99.46%	99.34%	99.25%	99.18%	99.07%	98.99%	98.89%	98.86%	98.81%	98.79%	98.72%	98.69%	98.58%	98.58%
CHILDREN	99.83%	99.62%	99.39%	99.19%	99.00%	98.87%	98.76%	98.60%	98.49%	98.35%	98.32%	98.24%	98.19%	98.08%	98.01%	97.89%	97.89%

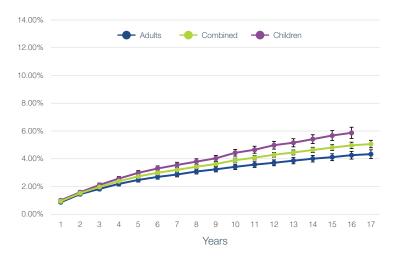




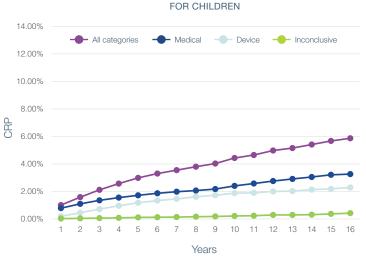
FOR ADULTS



REMOVAL RATES ANALYSIS FOR ALL ANALYSIS CATEGORIES AND DIFFERENT PATIENTS POPULATION



REMOVAL RATES ANALYSIS CATEGORIES



REMOVAL RATES ANALYSIS CATEGORIES FOR ADULTS AND CHILDREN



COMBINED ADULTS AND CHILDREN

Vaar	Madical CDD	Davisa CDD	Incomply size CDD	Total All Catagorias	То	tal
Year	Medical CRP	Device CRP	Inconclusive CRP	Total All Categories	CI Higher	CI Lower
1	0.78%	0.13%	0.02%	0.94%	1.00%	0.87%
2	1.20%	0.28%	0.04%	1.52%	1.60%	1.43%
3	1.48%	0.44%	0.06%	1.97%	2.07%	1.87%
4	1.71%	0.60%	0.08%	2.38%	2.49%	2.27%
5	1.92%	0.72%	0.10%	2.73%	2.84%	2.61%
6	2.06%	0.83%	0.11%	2.99%	3.11%	2.87%
7	2.19%	0.90%	0.13%	3.20%	3.32%	3.07%
8	2.31%	1.01%	0.14%	3.43%	3.56%	3.29%
9	2.41%	1.09%	0.15%	3.62%	3.76%	3.48%
10	2.58%	1.18%	0.17%	3.90%	4.05%	3.75%
11	2.72%	1.22%	0.18%	4.08%	4.24%	3.92%
12	2.86%	1.27%	0.21%	4.29%	4.45%	4.12%
13	2.99%	1.29%	0.22%	4.45%	4.63%	4.27%
14	3.11%	1.34%	0.23%	4.64%	4.83%	4.45%
15	3.24%	1.36%	0.25%	4.80%	5.01%	4.60%
16	3.30%	1.46%	0.27%	4.96%	5.19%	4.73%
17	3.39%	1.46%	0.27%	5.06%	5.32%	4.79%

Not all data may be shown alongside the graphs due to space limitations. Please see the Appendix at the end of the report for a complete data set.

HIRES 90K vendor A all

Number of registered HiRes 90K implants (vendor A all)

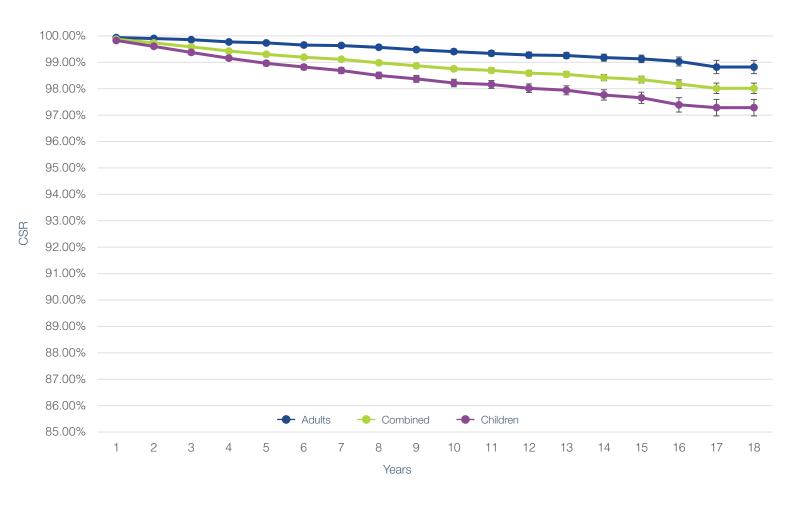
As of October 1, 2022.

Last year of distribution: 2018.ª

STANDARD	ADULTS	CHILDREN	COMBINED
ISO 5841-2:2014	32901	47165	82946 ^b
ANSI/AAMI CI86	41589°	41357	82946

- a. Dates provided are those for major markets covered by FDA and TUV regulation. Some implants may be pending approval in a subset of additional regions.
- b. The combined number also includes any registered users for whom we do not have date of birth information.
- c. The adult number also includes users whose personal information is not available or may not be obtainable due to certain privacy laws in certain countries.

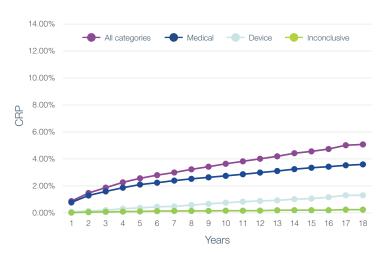
ISO 5841-2:2014



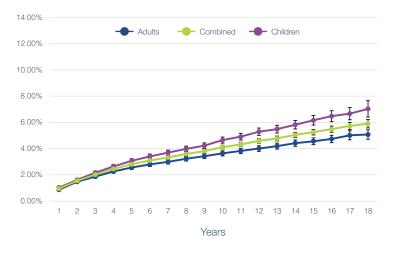
Years in use																		18
ADULTS	99.93%	99.90%	99.85%	99.77%	99.73%	99.65%	99.63%	99.56%	99.48%	99.40%	99.34%	99.27%	99.25%	99.17%	99.13%	99.03%	98.82%	98.82%
COMBINED	99.87%	99.73%	99.58%	99.42%	99.30%	99.19%	99.11%	98.98%	98.87%	98.75%	98.69%	98.59%	98.54%	98.42%	98.35%	98.18%	98.01%	98.01%
CHILDREN	99.82%	99.60%	99.37%	99.15%	98.96%	98.82%	98.69%	98.50%	98.37%	98.21%	98.16%	98.02%	97.94%	97.76%	97.65%	97.39%	97.28%	97.28%



FOR ADULTS



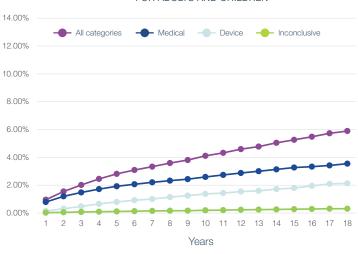
REMOVAL RATES ANALYSIS FOR ALL ANALYSIS CATEGORIES AND DIFFERENT PATIENTS POPULATION



REMOVAL RATES ANALYSIS CATEGORIES FOR CHILDREN



REMOVAL RATES ANALYSIS CATEGORIES FOR ADULTS AND CHILDREN



COMBINED ADULTS AND CHILDREN

Year	Medical CRP	Device CRP	Inconclusive CRP	Total All Categories	То	tal
rear	Medical CRP	Device CRP	inconclusive CRP	Total All Categories	Cl Higher	CI Lower
1	0.78%	0.15%	0.02%	0.95%	1.02%	0.88%
2	1.20%	0.31%	0.05%	1.54%	1.63%	1.46%
3	1.48%	0.47%	0.07%	2.02%	2.11%	1.92%
4	1.72%	0.65%	0.09%	2.45%	2.55%	2.34%
5	1.92%	0.79%	0.11%	2.81%	2.92%	2.69%
6	2.06%	0.92%	0.13%	3.09%	3.21%	2.97%
7	2.20%	1.00%	0.15%	3.33%	3.46%	3.20%
8	2.32%	1.14%	0.16%	3.59%	3.73%	3.46%
9	2.43%	1.25%	0.17%	3.81%	3.95%	3.67%
10	2.59%	1.37%	0.19%	4.11%	4.26%	3.96%
11	2.73%	1.43%	0.21%	4.32%	4.48%	4.16%
12	2.87%	1.54%	0.23%	4.59%	4.76%	4.41%
13	3.00%	1.59%	0.24%	4.77%	4.95%	4.59%
14	3.13%	1.72%	0.26%	5.04%	5.24%	4.85%
15	3.26%	1.79%	0.27%	5.26%	5.47%	5.04%
16	3.33%	1.95%	0.29%	5.48%	5.72%	5.25%
17	3.42%	2.09%	0.31%	5.73%	6.00%	5.45%
18	3.54%	2.13%	0.31%	5.89%	6.21%	5.57%

HIRES 90K vendor A pre-mod

Number of registered HiRes 90K implants (vendor A pre-mod)

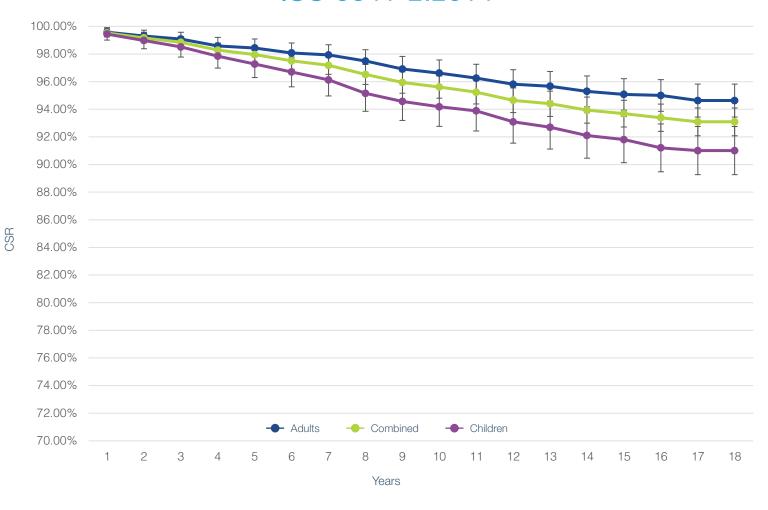
As of October 1, 2022.

Last year of distribution: 2005.ª

STANDARD	ADULTS	CHILDREN	COMBINED
ISO 5841-2:2014	1434	1093	2548 ^b
ANSI/AAMI CI86	1661°	887	2548

- a. Dates provided are those for major markets covered by FDA and TUV regulation. Some implants may be pending approval in a subset of additional regions.
- b. The combined number also includes any registered users for whom we do not have date of birth information.
- c. The adult number also includes users whose personal information is not available or may not be obtainable due to certain privacy laws in certain countries.

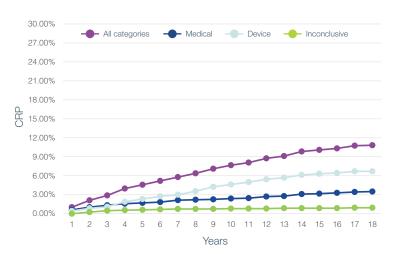
ISO 5841-2:2014



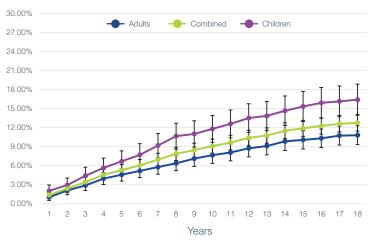
Years in use					5				9	10	11	12	13	14	15	16	17	18
ADULTS	99.58%	99.30%	99.08%	98.58%	98.44%	98.08%	97.93%	97.50%	96.91%	96.62%	96.26%	95.82%	95.67%	95.30%	95.08%	95.00%	94.63%	94.63%
COMBINED	99.53%	99.17%	98.85%	98.28%	97.96%	97.51%	97.18%	96.52%	95.94%	95.61%	95.23%	94.65%	94.40%	93.94%	93.69%	93.39%	93.09%	93.09%
CHILDREN	99.45%	98.98%	98.51%	97.85%	97.28%	96.70%	96.12%	95.15%	94.57%	94.18%	93.88%	93.09%	92.70%	92.10%	91.81%	91.21%	91.01%	91.01%

REMOVAL RATES ANALYSIS CATEGORIES

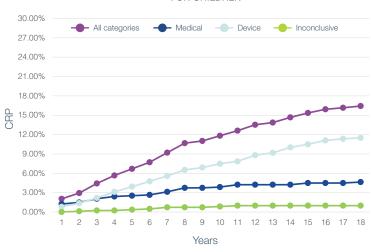
FOR ADULTS



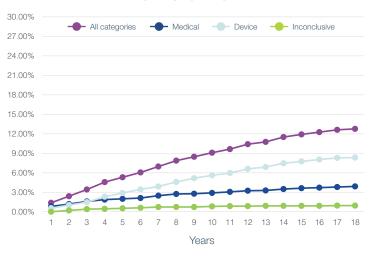
REMOVAL RATES ANALYSIS FOR ALL ANALYSIS CATEGORIES AND DIFFERENT PATIENTS POPULATION



REMOVAL RATES ANALYSIS CATEGORIES FOR CHILDREN



REMOVAL RATES ANALYSIS CATEGORIES FOR ADULTS AND CHILDREN



COMBINED ADULTS AND CHILDREN

Year	Medical CRP	Device CRP Inconclusive CRP		Total All Categories	То	tal
rear	Medical Chr	Device Chr	Inconclusive Chr	Total All Categories	CI Higher	CI Lower
1	0.83%	0.55%	0.00%	1.37%	1.83%	0.92%
2	1.18%	1.03%	0.20%	2.40%	2.99%	1.80%
3	1.58%	1.47%	0.40%	3.42%	4.13%	2.71%
4	1.87%	2.31%	0.44%	4.56%	5.37%	3.75%
5	1.99%	2.88%	0.53%	5.31%	6.18%	4.44%
6	2.11%	3.45%	0.61%	6.06%	6.99%	5.13%
7	2.48%	3.89%	0.73%	6.97%	7.96%	5.98%
8	2.73%	4.59%	0.73%	7.87%	8.92%	6.83%
9	2.77%	5.16%	0.73%	8.46%	9.55%	7.38%
10	2.90%	5.61%	0.82%	9.10%	10.21%	7.98%
11	3.07%	5.98%	0.86%	9.65%	10.80%	8.50%
12	3.24%	6.60%	0.86%	10.40%	11.59%	9.21%
13	3.28%	6.88%	0.91%	10.76%	11.96%	9.55%
14	3.50%	7.46%	0.91%	11.51%	12.75%	10.27%
15	3.63%	7.75%	0.91%	11.90%	13.16%	10.64%
16	3.71%	8.04%	0.91%	12.26%	13.54%	10.98%
17	3.80%	8.29%	0.95%	12.62%	13.91%	11.33%
18	3.90%	8.34%	0.95%	12.76%	14.06%	11.46%

Not all data may be shown alongside the graphs due to space limitations. Please see the Appendix at the end of the report for a complete data set.

HIRES 90K vendor B

Number of registered HiRes 90K implants (vendor B)

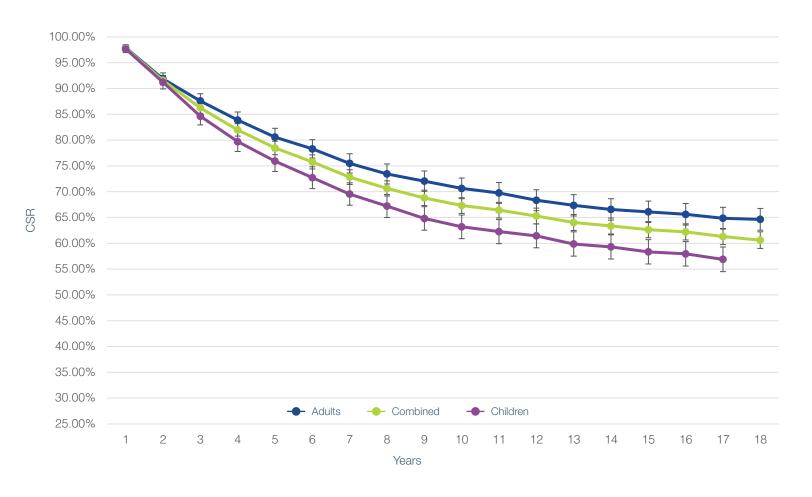
As of October 1, 2022.

Last year of distribution: subject to voluntary recall in 2006.a

STANDARD	ADULTS	CHILDREN	COMBINED
ISO 5841-2:2014	2186	1844	4061 ^b
ANSI/AAMI CI86	2559°	1502	4061

- a. Dates provided are those for major markets covered by FDA and TUV regulation. Some implants may be pending approval in a subset of additional regions.
- b. The combined number also includes any registered users for whom we do not have date of birth information.
- c. The adult number also includes users whose personal information is not available or may not be obtainable due to certain privacy laws in certain countries.

ISO 5841-2:2014



Years in use					5				9	10	11	12	13	14	15	16	17	18
ADULTS	97.87%	91.85%	87.58%	83.88%	80.57%	78.29%	75.48%	73.43%	72.04%	70.64%	69.76%	68.35%	67.35%	66.56%	66.09%	65.61%	64.85%	64.64%
COMBINED	97.79%	91.57%	86.25%	81.96%	78.48%	75.77%	72.82%	70.63%	68.79%	67.31%	66.41%	65.28%	64.03%	63.35%	62.63%	62.20%	61.31%	60.60%
CHILDREN	97.65%	91.21%	84.61%	79.68%	75.92%	72.71%	69.54%	67.21%	64.80%	63.19%	62.26%	61.44%	59.86%	59.29%	58.34%	57.96%	56.88%	NA

REMOVAL RATES ANALYSIS CATEGORIES FOR ADULTS

100.00%

90.00%

80.00% 70.00%

60.00%

50.00%

40.00%

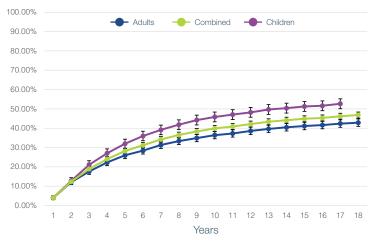
30.00%

20.00%

10.00%

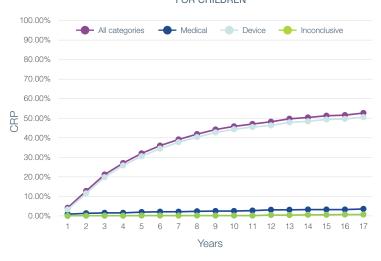


REMOVAL RATES ANALYSIS FOR ALL ANALYSIS CATEGORIES AND DIFFERENT PATIENTS POPULATION

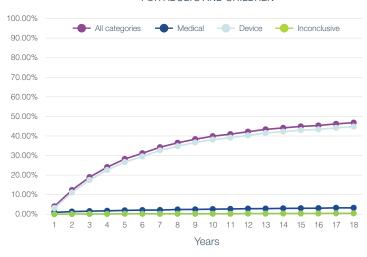


REMOVAL RATES ANALYSIS CATEGORIES FOR CHILDREN

Years



REMOVAL RATES ANALYSIS CATEGORIES FOR ADULTS AND CHILDREN



COMBINED ADULTS AND CHILDREN

Year	Medical CRP	Device CRP	Inconclusive CRP	Total All Categories	То	tal
rear	Medical Chr	Device Chr	Inconclusive Chr	Total All Categories	CI Higher	CI Lower
1	0.93%	3.12%	0.00%	4.02%	4.62%	3.41%
2	1.33%	11.09%	0.08%	12.34%	13.36%	11.33%
3	1.56%	17.53%	0.14%	18.93%	20.13%	17.72%
4	1.74%	22.59%	0.14%	24.04%	25.36%	22.73%
5	1.94%	26.63%	0.21%	28.20%	29.59%	26.82%
6	2.08%	29.56%	0.21%	31.17%	32.60%	29.74%
7	2.15%	32.63%	0.21%	34.22%	35.68%	32.75%
8	2.42%	34.78%	0.21%	36.49%	37.98%	35.00%
9	2.46%	36.65%	0.21%	38.34%	39.84%	36.84%
10	2.58%	38.17%	0.21%	39.89%	41.41%	38.38%
11	2.66%	39.15%	0.21%	40.90%	42.41%	39.38%
12	2.83%	40.29%	0.29%	42.15%	43.68%	40.62%
13	2.87%	41.51%	0.29%	43.36%	44.89%	41.82%
14	3.00%	42.21%	0.34%	44.14%	45.67%	42.60%
15	3.04%	42.97%	0.34%	44.89%	46.43%	43.35%
16	3.09%	43.36%	0.38%	45.32%	46.86%	43.78%
17	3.25%	44.14%	0.44%	46.20%	47.74%	44.65%
18	3.25%	44.79%	0.44%	46.82%	48.39%	45.25%

Not all data may be shown alongside the graphs due to space limitations. Please see the **Appendix** at the end of the report for a complete data set.

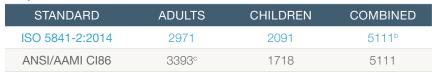
CII BIONIC EAR

The CII Bionic Ear cochlear implant is the base for the advanced technology found in Advanced Bionics implants today. The platform can still take advantage of the latest innovations today. It benefited from the mechanical improvement made to the earlier C1.2 implants.

Number of registered CII implants

As of October 1, 2022.

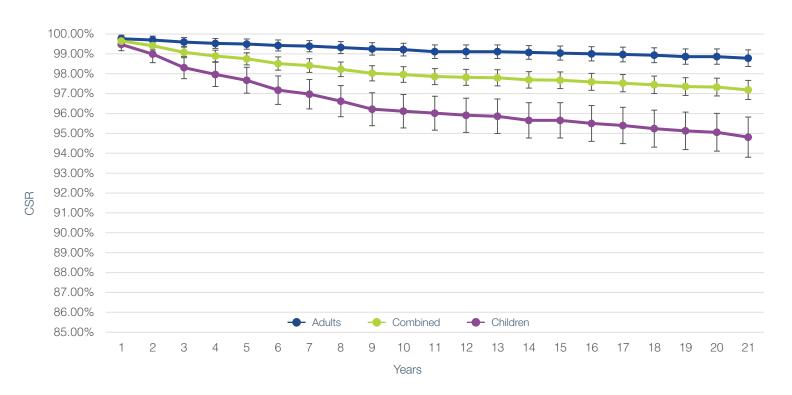
Last year of distribution: 2004.a





b. The combined number also includes any registered users for whom we do not have date of birth information.

ISO 5841-2:2014

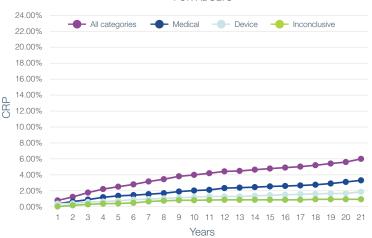


Years in use					5		6				10
ADULTS	99.76%	99.70%	99.59%	99.53%	6 99.4	19% 99	9.42%	99.39%	99.32%	99.25%	99.21%
COMBINED	99.65%	99.41%	99.07%	98.89%	6 98.7	75% 98	3.51%	98.41%	98.23%	98.02%	97.96%
CHILDREN	99.47%	98.99%	98.31%	97.96%	6 97.6	67% 9	7.17%	96.97%	96.62%	96.22%	96.12%
		10	10			10		10			
Years in use	11	12	13	14	15	16	17	18	19	20	21
ADULTS	99.11%	99.11%	99.11%	99.07%	99.04%	99.00%	98.97%	98.93%	98.86%	98.86%	98.78%
COMBINED	97.86%	97.82%	97.80%	97.69%	97.67%	97.59%	97.53%	97.44%	97.36%	97.33%	97.19%
CHILDREN	96.01%	95.91%	95.86%	95.66%	95.66%	95.50%	95.40%	95.24%	95.13%	95.06%	94.81%

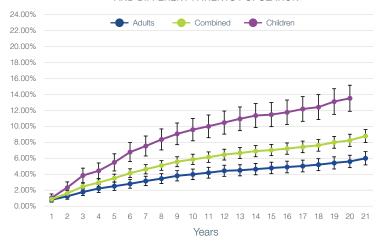


c. The adult number also includes users whose personal information is not available or may not be obtainable due to certain privacy laws in certain countries.





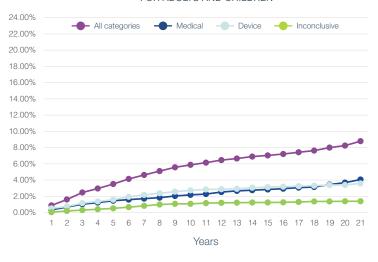
REMOVAL RATES ANALYSIS FOR ALL ANALYSIS CATEGORIES AND DIFFERENT PATIENTS POPULATION



REMOVAL RATES ANALYSIS CATEGORIES FOR CHILDREN



REMOVAL RATES ANALYSIS CATEGORIES FOR ADULTS AND CHILDREN



COMBINED ADULTS AND CHILDREN

Year Medical CRP Device CRP Inconclusive CRP Total All Categories Total CI Higher CI Lower 1 0.33% 0.51% 0.04% 0.88% 1.14% 0.62% 2 0.67% 0.75% 0.20% 1.61% 1.95% 1.26% 3 1.03% 1.16% 0.30% 2.47% 2.89% 2.04% 4 1.23% 1.36% 0.40% 2.96% 3.42% 2.49% 5 1.45% 1.58% 0.52% 3.51% 4.01% 3.00% 6 1.59% 1.94% 0.66% 4.14% 4.68% 3.59% 7 1.71% 2.16% 0.82% 4.63% 5.21% 4.05% 8 1.83% 2.37% 0.99% 5.10% 5.71% 4.50% 9 2.03% 2.57% 1.07% 5.57% 6.20% 4.94% 10 2.18% 2.73% 1.07% 5.87% 6.51% 5.22% 11 2.28%			COIV	IDINED ADOLIS AI	ND CHILDHEN		
1 0.33% 0.51% 0.04% 0.88% 1.14% 0.62% 2 0.67% 0.75% 0.20% 1.61% 1.95% 1.26% 3 1.03% 1.16% 0.30% 2.47% 2.89% 2.04% 4 1.23% 1.36% 0.40% 2.96% 3.42% 2.49% 5 1.45% 1.58% 0.52% 3.51% 4.01% 3.00% 6 1.59% 1.94% 0.66% 4.14% 4.68% 3.59% 7 1.71% 2.16% 0.82% 4.63% 5.21% 4.05% 8 1.83% 2.37% 0.99% 5.10% 5.71% 4.50% 9 2.03% 2.57% 1.07% 5.57% 6.20% 4.94% 10 2.18% 2.73% 1.07% 5.87% 6.51% 5.22% 11 2.28% 2.83% 1.15% 6.15% 6.80% 5.49% 12 2.53% 2.88% 1.20%	V/	Madia d ODD	D. 1 ODD	1	Talal All Calana in	То	tal
2 0.67% 0.75% 0.20% 1.61% 1.95% 1.26% 3 1.03% 1.16% 0.30% 2.47% 2.89% 2.04% 4 1.23% 1.36% 0.40% 2.96% 3.42% 2.49% 5 1.45% 1.58% 0.52% 3.51% 4.01% 3.00% 6 1.59% 1.94% 0.66% 4.14% 4.68% 3.59% 7 1.71% 2.16% 0.82% 4.63% 5.21% 4.05% 8 1.83% 2.37% 0.99% 5.10% 5.71% 4.50% 9 2.03% 2.57% 1.07% 5.57% 6.20% 4.94% 10 2.18% 2.73% 1.07% 5.87% 6.51% 5.22% 11 2.28% 2.83% 1.15% 6.15% 6.80% 5.49% 12 2.53% 2.88% 1.20% 6.46% 7.14% 5.97% 13 2.67% 2.92% 1.22% 6.66% 7.34% 5.97% 14 2.75% 3.06% 1.24% </th <th>Year</th> <th>Medical CRP</th> <th>Device CRP</th> <th>Inconclusive CRP</th> <th>lotal All Categories</th> <th>CI Higher</th> <th>CI Lower</th>	Year	Medical CRP	Device CRP	Inconclusive CRP	lotal All Categories	CI Higher	CI Lower
3 1.03% 1.16% 0.30% 2.47% 2.89% 2.04% 4 1.23% 1.36% 0.40% 2.96% 3.42% 2.49% 5 1.45% 1.58% 0.52% 3.51% 4.01% 3.00% 6 1.59% 1.94% 0.66% 4.14% 4.68% 3.59% 7 1.71% 2.16% 0.82% 4.63% 5.21% 4.05% 8 1.83% 2.37% 0.99% 5.10% 5.71% 4.50% 9 2.03% 2.57% 1.07% 5.57% 6.20% 4.94% 10 2.18% 2.73% 1.07% 5.87% 6.51% 5.22% 11 2.28% 2.83% 1.15% 6.15% 6.80% 5.49% 12 2.53% 2.88% 1.20% 6.46% 7.14% 5.79% 13 2.67% 2.92% 1.22% 6.66% 7.34% 5.97% 14 2.75% 3.06% 1.24%	1	0.33%	0.51%	0.04%	0.88%	1.14%	0.62%
4 1.23% 1.36% 0.40% 2.96% 3.42% 2.49% 5 1.45% 1.58% 0.52% 3.51% 4.01% 3.00% 6 1.59% 1.94% 0.66% 4.14% 4.68% 3.59% 7 1.71% 2.16% 0.82% 4.63% 5.21% 4.05% 8 1.83% 2.37% 0.99% 5.10% 5.71% 4.50% 9 2.03% 2.57% 1.07% 5.57% 6.20% 4.94% 10 2.18% 2.73% 1.07% 5.87% 6.51% 5.22% 11 2.28% 2.83% 1.15% 6.15% 6.80% 5.49% 12 2.53% 2.88% 1.20% 6.46% 7.14% 5.79% 13 2.67% 2.92% 1.22% 6.66% 7.34% 5.97% 14 2.75% 3.06% 1.24% 6.89% 7.59% 6.20% 15 2.83% 3.12% 1.24% 7.03% 7.73% 6.33% 16 2.94% 3.18% 1.26%	2	0.67%	0.75%	0.20%	1.61%	1.95%	1.26%
5 1.45% 1.58% 0.52% 3.51% 4.01% 3.00% 6 1.59% 1.94% 0.66% 4.14% 4.68% 3.59% 7 1.71% 2.16% 0.82% 4.63% 5.21% 4.05% 8 1.83% 2.37% 0.99% 5.10% 5.71% 4.50% 9 2.03% 2.57% 1.07% 5.57% 6.20% 4.94% 10 2.18% 2.73% 1.07% 5.87% 6.51% 5.22% 11 2.28% 2.83% 1.15% 6.15% 6.80% 5.49% 12 2.53% 2.88% 1.20% 6.46% 7.14% 5.79% 13 2.67% 2.92% 1.22% 6.66% 7.34% 5.97% 14 2.75% 3.06% 1.24% 6.89% 7.59% 6.20% 15 2.83% 3.12% 1.24% 7.03% 7.73% 6.33% 16 2.94% 3.18% 1.26%	3	1.03%	1.16%	0.30%	2.47%	2.89%	2.04%
6 1.59% 1.94% 0.66% 4.14% 4.68% 3.59% 7 1.71% 2.16% 0.82% 4.63% 5.21% 4.05% 8 1.83% 2.37% 0.99% 5.10% 5.71% 4.50% 9 2.03% 2.57% 1.07% 5.57% 6.20% 4.94% 10 2.18% 2.73% 1.07% 5.87% 6.51% 5.22% 11 2.28% 2.83% 1.15% 6.15% 6.80% 5.49% 12 2.53% 2.88% 1.20% 6.46% 7.14% 5.79% 13 2.67% 2.92% 1.22% 6.66% 7.34% 5.97% 14 2.75% 3.06% 1.24% 6.89% 7.59% 6.20% 15 2.83% 3.12% 1.24% 7.03% 7.73% 6.33% 16 2.94% 3.18% 1.26% 7.21% 7.92% 6.50% 17 3.06% 3.24% 1.30%	4	1.23%	1.36%	0.40%	2.96%	3.42%	2.49%
7 1.71% 2.16% 0.82% 4.63% 5.21% 4.05% 8 1.83% 2.37% 0.99% 5.10% 5.71% 4.50% 9 2.03% 2.57% 1.07% 5.57% 6.20% 4.94% 10 2.18% 2.73% 1.07% 5.87% 6.51% 5.22% 11 2.28% 2.83% 1.15% 6.15% 6.80% 5.49% 12 2.53% 2.88% 1.20% 6.46% 7.14% 5.79% 13 2.67% 2.92% 1.22% 6.66% 7.34% 5.97% 14 2.75% 3.06% 1.24% 6.89% 7.59% 6.20% 15 2.83% 3.12% 1.24% 7.03% 7.73% 6.33% 16 2.94% 3.18% 1.26% 7.21% 7.92% 6.50% 17 3.06% 3.24% 1.30% 7.43% 8.15% 6.71% 18 3.14% 3.31% 1.36%	5	1.45%	1.58%	0.52%	3.51%	4.01%	3.00%
8 1.83% 2.37% 0.99% 5.10% 5.71% 4.50% 9 2.03% 2.57% 1.07% 5.57% 6.20% 4.94% 10 2.18% 2.73% 1.07% 5.87% 6.51% 5.22% 11 2.28% 2.83% 1.15% 6.15% 6.80% 5.49% 12 2.53% 2.88% 1.20% 6.46% 7.14% 5.79% 13 2.67% 2.92% 1.22% 6.66% 7.34% 5.97% 14 2.75% 3.06% 1.24% 6.89% 7.59% 6.20% 15 2.83% 3.12% 1.24% 7.03% 7.73% 6.33% 16 2.94% 3.18% 1.26% 7.21% 7.92% 6.50% 17 3.06% 3.24% 1.30% 7.43% 8.15% 6.71% 18 3.14% 3.31% 1.36% 7.62% 8.35% 6.90% 19 3.45% 3.39% 1.36%	6	1.59%	1.94%	0.66%	4.14%	4.68%	3.59%
9 2.03% 2.57% 1.07% 5.57% 6.20% 4.94% 10 2.18% 2.73% 1.07% 5.87% 6.51% 5.22% 11 2.28% 2.83% 1.15% 6.15% 6.80% 5.49% 12 2.53% 2.88% 1.20% 6.46% 7.14% 5.79% 13 2.67% 2.92% 1.22% 6.66% 7.34% 5.97% 14 2.75% 3.06% 1.24% 6.89% 7.59% 6.20% 15 2.83% 3.12% 1.24% 7.03% 7.73% 6.33% 16 2.94% 3.18% 1.26% 7.21% 7.92% 6.50% 17 3.06% 3.24% 1.30% 7.43% 8.15% 6.71% 18 3.14% 3.31% 1.36% 7.62% 8.35% 6.90% 19 3.45% 3.39% 1.36% 8.00% 8.74% 7.25% 20 3.69% 3.39% 1.39% 8.25% 9.01% 7.49%	7	1.71%	2.16%	0.82%	4.63%	5.21%	4.05%
10 2.18% 2.73% 1.07% 5.87% 6.51% 5.22% 11 2.28% 2.83% 1.15% 6.15% 6.80% 5.49% 12 2.53% 2.88% 1.20% 6.46% 7.14% 5.79% 13 2.67% 2.92% 1.22% 6.66% 7.34% 5.97% 14 2.75% 3.06% 1.24% 6.89% 7.59% 6.20% 15 2.83% 3.12% 1.24% 7.03% 7.73% 6.33% 16 2.94% 3.18% 1.26% 7.21% 7.92% 6.50% 17 3.06% 3.24% 1.30% 7.43% 8.15% 6.71% 18 3.14% 3.31% 1.36% 7.62% 8.35% 6.90% 19 3.45% 3.39% 1.36% 8.00% 8.74% 7.25% 20 3.69% 3.39% 1.39% 8.25% 9.01% 7.49%	8	1.83%	2.37%	0.99%	5.10%	5.71%	4.50%
11 2.28% 2.83% 1.15% 6.15% 6.80% 5.49% 12 2.53% 2.88% 1.20% 6.46% 7.14% 5.79% 13 2.67% 2.92% 1.22% 6.66% 7.34% 5.97% 14 2.75% 3.06% 1.24% 6.89% 7.59% 6.20% 15 2.83% 3.12% 1.24% 7.03% 7.73% 6.33% 16 2.94% 3.18% 1.26% 7.21% 7.92% 6.50% 17 3.06% 3.24% 1.30% 7.43% 8.15% 6.71% 18 3.14% 3.31% 1.36% 7.62% 8.35% 6.90% 19 3.45% 3.39% 1.36% 8.00% 8.74% 7.25% 20 3.69% 3.39% 1.39% 8.25% 9.01% 7.49%	9	2.03%	2.57%	1.07%	5.57%	6.20%	4.94%
12 2.53% 2.88% 1.20% 6.46% 7.14% 5.79% 13 2.67% 2.92% 1.22% 6.66% 7.34% 5.97% 14 2.75% 3.06% 1.24% 6.89% 7.59% 6.20% 15 2.83% 3.12% 1.24% 7.03% 7.73% 6.33% 16 2.94% 3.18% 1.26% 7.21% 7.92% 6.50% 17 3.06% 3.24% 1.30% 7.43% 8.15% 6.71% 18 3.14% 3.31% 1.36% 7.62% 8.35% 6.90% 19 3.45% 3.39% 1.36% 8.00% 8.74% 7.25% 20 3.69% 3.39% 1.39% 8.25% 9.01% 7.49%	10	2.18%	2.73%	1.07%	5.87%	6.51%	5.22%
13 2.67% 2.92% 1.22% 6.66% 7.34% 5.97% 14 2.75% 3.06% 1.24% 6.89% 7.59% 6.20% 15 2.83% 3.12% 1.24% 7.03% 7.73% 6.33% 16 2.94% 3.18% 1.26% 7.21% 7.92% 6.50% 17 3.06% 3.24% 1.30% 7.43% 8.15% 6.71% 18 3.14% 3.31% 1.36% 7.62% 8.35% 6.90% 19 3.45% 3.39% 1.36% 8.00% 8.74% 7.25% 20 3.69% 3.39% 1.39% 8.25% 9.01% 7.49%	11	2.28%	2.83%	1.15%	6.15%	6.80%	5.49%
14 2.75% 3.06% 1.24% 6.89% 7.59% 6.20% 15 2.83% 3.12% 1.24% 7.03% 7.73% 6.33% 16 2.94% 3.18% 1.26% 7.21% 7.92% 6.50% 17 3.06% 3.24% 1.30% 7.43% 8.15% 6.71% 18 3.14% 3.31% 1.36% 7.62% 8.35% 6.90% 19 3.45% 3.39% 1.36% 8.00% 8.74% 7.25% 20 3.69% 3.39% 1.39% 8.25% 9.01% 7.49%	12	2.53%	2.88%	1.20%	6.46%	7.14%	5.79%
15 2.83% 3.12% 1.24% 7.03% 7.73% 6.33% 16 2.94% 3.18% 1.26% 7.21% 7.92% 6.50% 17 3.06% 3.24% 1.30% 7.43% 8.15% 6.71% 18 3.14% 3.31% 1.36% 7.62% 8.35% 6.90% 19 3.45% 3.39% 1.36% 8.00% 8.74% 7.25% 20 3.69% 3.39% 1.39% 8.25% 9.01% 7.49%	13	2.67%	2.92%	1.22%	6.66%	7.34%	5.97%
16 2.94% 3.18% 1.26% 7.21% 7.92% 6.50% 17 3.06% 3.24% 1.30% 7.43% 8.15% 6.71% 18 3.14% 3.31% 1.36% 7.62% 8.35% 6.90% 19 3.45% 3.39% 1.36% 8.00% 8.74% 7.25% 20 3.69% 3.39% 1.39% 8.25% 9.01% 7.49%	14	2.75%	3.06%	1.24%	6.89%	7.59%	6.20%
17 3.06% 3.24% 1.30% 7.43% 8.15% 6.71% 18 3.14% 3.31% 1.36% 7.62% 8.35% 6.90% 19 3.45% 3.39% 1.36% 8.00% 8.74% 7.25% 20 3.69% 3.39% 1.39% 8.25% 9.01% 7.49%	15	2.83%	3.12%	1.24%	7.03%	7.73%	6.33%
18 3.14% 3.31% 1.36% 7.62% 8.35% 6.90% 19 3.45% 3.39% 1.36% 8.00% 8.74% 7.25% 20 3.69% 3.39% 1.39% 8.25% 9.01% 7.49%	16	2.94%	3.18%	1.26%	7.21%	7.92%	6.50%
19 3.45% 3.39% 1.36% 8.00% 8.74% 7.25% 20 3.69% 3.39% 1.39% 8.25% 9.01% 7.49%	17	3.06%	3.24%	1.30%	7.43%	8.15%	6.71%
20 3.69% 3.39% 1.39% 8.25% 9.01% 7.49%	18	3.14%	3.31%	1.36%	7.62%	8.35%	6.90%
	19	3.45%	3.39%	1.36%	8.00%	8.74%	7.25%
21 4.06% 3.58% 1.39% 8.79% 9.60% 7.97%	20	3.69%	3.39%	1.39%	8.25%	9.01%	7.49%
	21	4.06%	3.58%	1.39%	8.79%	9.60%	7.97%

Not all data may be shown alongside the graphs due to space limitations. Please see the **Appendix** at the end of the report for a complete data set.

CLARION 1.2

The Clarion 1.2 (C1.2) implant offers mechanical improvements over its predecessor the C1.0 implant, which first introduced independent current-sources, a key technology differentiator for Advanced Bionics implants.

Number of registered C1.2 implants

As of October 1, 2022.

Last year of distribution: 2004.ª

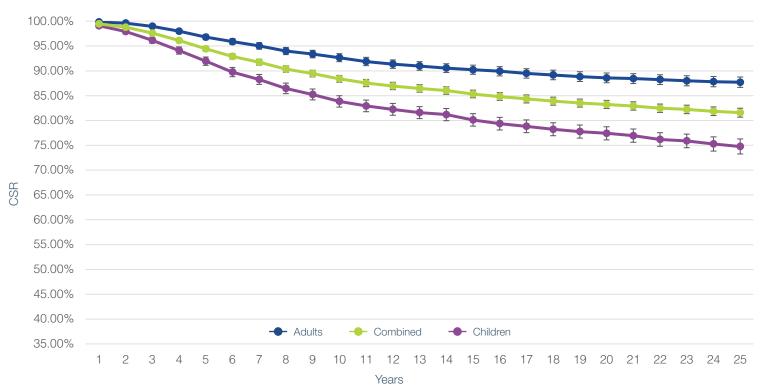
STANDARD	ADULTS	CHILDREN	COMBINED
ISO 5841-2:2014	3746	4153	8465 ^b
ANSI/AAMI CI86	4938°	3527	8465



b. The combined number also includes any registered users for whom we do not have date of birth information.

c. The adult number also includes users whose personal information is not available or may not be obtainable due to certain privacy laws in certain countries.

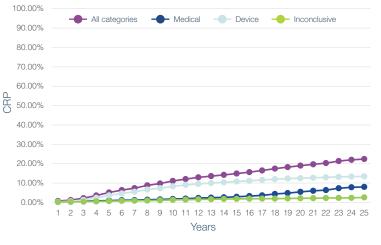
ISO 5841-2:2014

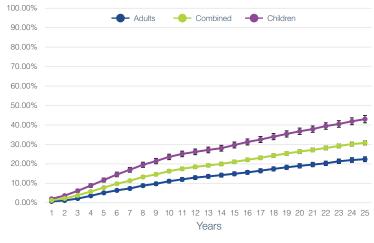


					6				10	11	12	13
99.83%	99.62%	98.97%	97.98%	96.80%	95.89%	95.02%	93.99%	93.37%	92.65%	91.88%	91.36%	90.98%
99.47%	98.79%	97.60%	96.11%	94.44%	92.92%	91.75%	90.36%	89.46%	88.40%	87.56%	86.95%	86.45%
99.08%	97.93%	96.15%	94.11%	91.95%	89.75%	88.27%	86.47%	85.24%	83.85%	82.94%	82.24%	81.60%
1/1	15	16	17	10	- 1	0 '	20	91	22	22	24	25
14	13	10	17	10	1	9	20	۷ ا	22	20	24	20
90.55%	90.22%	89.92%	89.49%	6 89.18	88.8	84% 88.	.57% 8	8.44%	88.23%	87.99%	87.81%	87.71%
86.04%	85.34%	84.82%	84.35%	6 83.91	% 83.5	51% 83.	.22% 8	2.92%	82.48%	82.22%	81.86%	81.58%
81.19%	80.12%	79.37%	78.83%	6 78.23	3% 77.7	6% 77.	.43% 7	6.93%	76.18%	75.89%	75.29%	74.77%
	9.47% 9.08% 14 90.55% 86.04%	99.83% 99.62% 99.47% 98.79% 90.08% 97.93% 14 15 90.55% 90.22% 85.34%	19.83% 99.62% 98.97% 19.47% 98.79% 97.60% 19.08% 97.93% 96.15% 14 15 16 30.55% 90.22% 89.92% 36.04% 85.34% 84.82%	99.83% 99.62% 98.97% 97.98% 99.47% 98.79% 97.60% 96.11% 9.08% 97.93% 96.15% 94.11% 15 16 17 90.55% 90.22% 89.92% 89.49% 86.04% 85.34% 84.82% 84.35%	19.83% 99.62% 98.97% 97.98% 96.80% 19.47% 98.79% 97.60% 96.11% 94.44% 19.08% 97.93% 96.15% 94.11% 91.95% 14 15 16 17 18 30.55% 90.22% 89.92% 89.49% 89.18 36.04% 85.34% 84.82% 84.35% 83.91	19.83% 99.62% 98.97% 97.98% 96.80% 95.89% 19.47% 98.79% 97.60% 96.11% 94.44% 92.92% 19.08% 97.93% 96.15% 94.11% 91.95% 89.75% 14 15 16 17 18 1 30.55% 90.22% 89.92% 89.49% 89.18% 88.8 36.04% 85.34% 84.82% 84.35% 83.91% 83.5	19.83% 99.62% 98.97% 97.98% 96.80% 95.89% 95.02% 19.47% 98.79% 97.60% 96.11% 94.44% 92.92% 91.75% 19.08% 97.93% 96.15% 94.11% 91.95% 89.75% 88.27% 14 15 16 17 18 19 2 30.55% 90.22% 89.92% 89.49% 89.18% 88.84% 88.84% 36.04% 85.34% 84.82% 84.35% 83.91% 83.51% 83.51%	19.83% 99.62% 98.97% 97.98% 96.80% 95.89% 95.02% 93.99% 19.47% 98.79% 97.60% 96.11% 94.44% 92.92% 91.75% 90.36% 19.08% 97.93% 96.15% 94.11% 91.95% 89.75% 88.27% 86.47% 14 15 16 17 18 19 20 30.55% 90.22% 89.92% 89.49% 89.18% 88.84% 88.57% 8 36.04% 85.34% 84.82% 84.35% 83.91% 83.51% 83.22% 8	19.83% 99.62% 98.97% 97.98% 96.80% 95.89% 95.02% 93.99% 93.37% 19.47% 98.79% 97.60% 96.11% 94.44% 92.92% 91.75% 90.36% 89.46% 19.08% 97.93% 96.15% 94.11% 91.95% 89.75% 88.27% 86.47% 85.24% 14 15 16 17 18 19 20 21 20.55% 90.22% 89.92% 89.49% 89.18% 88.84% 88.57% 88.44% 36.04% 85.34% 84.82% 84.35% 83.91% 83.51% 83.22% 82.92%	19.83% 99.62% 98.97% 97.98% 96.80% 95.89% 95.02% 93.99% 93.37% 92.65% 19.47% 98.79% 97.60% 96.11% 94.44% 92.92% 91.75% 90.36% 89.46% 88.40% 19.08% 97.93% 96.15% 94.11% 91.95% 89.75% 88.27% 86.47% 85.24% 83.85% 14 15 16 17 18 19 20 21 22 20.55% 90.22% 89.92% 89.49% 89.18% 88.84% 88.57% 88.44% 88.23% 36.04% 85.34% 84.82% 84.35% 83.91% 83.51% 83.22% 82.92% 82.48%	98.83% 99.62% 98.97% 97.98% 96.80% 95.89% 95.02% 93.99% 93.37% 92.65% 91.88% 99.47% 98.79% 97.60% 96.11% 94.44% 92.92% 91.75% 90.36% 89.46% 88.40% 87.56% 19.08% 97.93% 96.15% 94.11% 91.95% 89.75% 88.27% 86.47% 85.24% 83.85% 82.94% 14 15 16 17 18 19 20 21 22 23 30.55% 90.22% 89.92% 89.49% 89.18% 88.84% 88.57% 88.44% 88.23% 87.99% 36.04% 85.34% 84.82% 84.35% 83.91% 83.51% 83.22% 82.92% 82.48% 82.22%	98.83% 99.62% 98.97% 97.98% 96.80% 95.89% 95.02% 93.99% 93.37% 92.65% 91.88% 91.36% 99.47% 98.79% 97.60% 96.11% 94.44% 92.92% 91.75% 90.36% 89.46% 88.40% 87.56% 86.95% 19.08% 97.93% 96.15% 94.11% 91.95% 89.75% 88.27% 86.47% 85.24% 83.85% 82.94% 82.24% 14 15 16 17 18 19 20 21 22 23 24 90.55% 90.22% 89.92% 89.49% 89.18% 88.84% 88.57% 88.44% 88.23% 87.99% 87.81% 36.04% 85.34% 84.82% 84.35% 83.91% 83.51% 83.22% 82.92% 82.48% 82.22% 81.86%



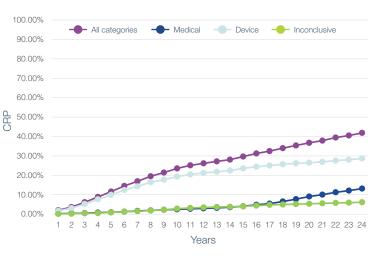
REMOVAL RATES ANALYSIS FOR ALL ANALYSIS CATEGORIES AND DIFFERENT PATIENTS POPULATION

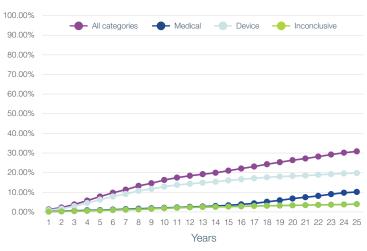




REMOVAL RATES ANALYSIS CATEGORIES FOR CHILDREN

REMOVAL RATES ANALYSIS CATEGORIES FOR ADULTS AND CHILDREN





COMBINED ADULTS AND CHILDREN

		0 0				
Year	Medical CRP	Device CRP	Inconclusive CRP	Total All Categories	То	
					CI Higher	CI Lower
1	0.26%	0.87%	0.13%	1.25%	1.49%	1.02%
2	0.38%	1.63%	0.22%	2.22%	2.53%	1.90%
3	0.55%	2.92%	0.36%	3.81%	4.22%	3.40%
4	0.78%	4.53%	0.51%	5.75%	6.25%	5.26%
5	0.94%	6.24%	0.75%	7.82%	8.40%	7.25%
6	1.16%	7.85%	0.92%	9.76%	10.39%	9.12%
7	1.35%	9.14%	1.08%	11.34%	12.02%	10.66%
8	1.58%	10.71%	1.30%	13.25%	13.98%	12.53%
9	1.80%	11.66%	1.55%	14.59%	15.34%	13.83%
10	2.05%	12.86%	1.88%	16.24%	17.04%	15.45%
11	2.24%	13.75%	2.08%	17.44%	18.25%	16.62%
12	2.52%	14.33%	2.31%	18.41%	19.24%	17.58%
13	2.73%	14.86%	2.42%	19.20%	20.04%	18.35%
14	2.97%	15.34%	2.53%	19.93%	20.79%	19.07%
15	3.33%	16.06%	2.66%	21.02%	21.89%	20.14%
16	3.84%	16.62%	2.82%	22.08%	22.97%	21.19%
17	4.31%	17.14%	3.02%	23.10%	24.01%	22.20%
18	5.15%	17.60%	3.10%	24.27%	25.19%	23.35%
19	5.89%	17.98%	3.23%	25.31%	26.24%	24.37%
20	6.77%	18.24%	3.34%	26.33%	27.27%	25.38%
21	7.45%	18.51%	3.44%	27.17%	28.13%	26.21%
22	8.12%	18.91%	3.58%	28.16%	29.14%	27.19%
23	9.03%	19.23%	3.65%	29.21%	30.20%	28.21%
24	9.73%	19.58%	3.77%	30.14%	31.18%	29.11%
25	10.16%	19.80%	3.97%	30.81%	31.89%	29.73%

Not all data may be shown alongside the graphs due to space limitations. Please see the **Appendix** at the end of the report for a complete data set.

CLARION 1.0

The Clarion 1.0 (C1.0) implant was Advanced Bionics first device, the start of a technology-forward lineage that continues today. As the number of children implanted with the C1.0 is below the level required for statistical analysis, the data is included in the combined data.

Number of registered C1.0 implants

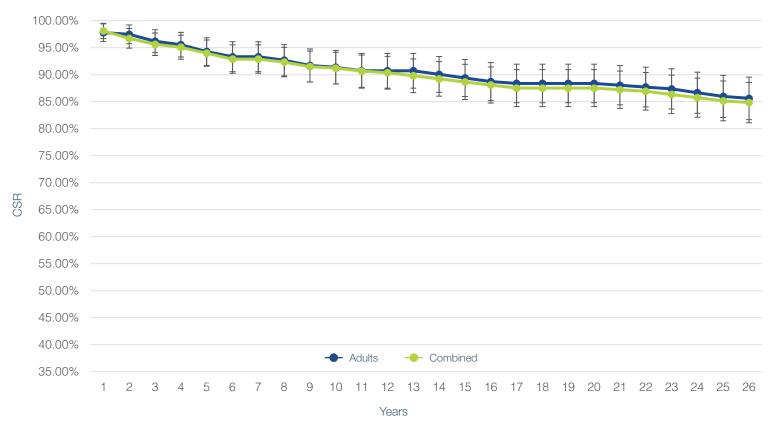
As of October 1, 2022. Last year of distribution: 1997.^a

STANDARD	ADULTS	CHILDREN	COMBINED
ISO 5841-2:2014	316	49	367 ^b
ANSI/AAMI CI86	_	_	_



- a. Dates provided are those for major markets covered by FDA and TUV regulation. Some implants may be pending approval in a subset of additional regions.
- b. The combined number also includes any registered users for whom we do not have date of birth information.

ISO 5841-2:2014



Years in use					5	6			9	10	11	12	13
ADULTS	97.78%	97.47%	96.19%	95.56%	94.28%	93.32%	93.32%	92.67%	91.70%	91.38%	90.73%	90.73%	90.73%
COMBINED	98.09%	96.73%	95.63%	95.08%	93.98%	92.88%	92.88%	92.33%	91.49%	91.22%	90.65%	90.37%	89.80%
Years in use	14	15	16	17	18	19	20	21	22	23	24	25	26
ADULTS	90.06%	89.39%	88.72%	88.39%	88.39%	88.39%	88.39%	88.05%	87.70%	87.36%	86.66%	85.96%	85.61%
COMBINED	89.23%	88.65%	88.08%	87.51%	87.51%	87.51%	87.51%	87.21%	86.92%	86.33%	85.74%	85.15%	84.84%

The ANSI/AAMI CI86 Standard does not require reporting for devices older than 20 years after the last implantation of that device type. Please refer to the ISO data for information.

SOUND PROCESSOR STIMULATORS

For each currently-available sound processor, there will be a simple measure of reliability based on the average global yearly return rate and graphical data in compliance with ANSI/AAMI CI86 Standard that shows the monthly failure rate.

Where possible, this monthly data is further categorized into failure mechanisms, if known, to include mechanical, electronic, moisture damage, and other. Processors that meet all specifications are included and they are classified as no fault found. Where available, the number of registered users is shown, categorized into adult, children, and combined.



NAÍDA CI M AND SKY CI M

The Naída™ CI M sound processor for adults and Sky CI™ M sound processor for children are the newest Advanced Bionics products integrated with the latest advancements from Phonak, the Marvel platform. With built-in connectivity solutions and the ability to automatically sense and adapt to every situation, the Naída CI M and Sky CI M processors are designed to give you the best hearing experience.

Reliability of the Naída CI M and Sky CI M sound processors are combined at this time due to the limited number of devices in use. As field data becomes available globally, we will present the reliability metrics as separate products in future reports.

RELIABILITY: 99.15%^a



FAILED COMPONENT RETURN RATE^b

					Feb 2022 N	Mar 2022 - A	Apr 2022	May 2022	Jun 2022 🔾	Jul 2022 /	Aug 2022	Sep 2022
MECHANICAL 0.	.41%	0.06%	0.19%	0.16%	0.28%	0.29%	0.28%	0.17%	0.27%	0.26%	0.33%	0.21%
MOISTURE 0.	.04%	0.08%	0.06%	0.08%	0.00%	0.08%	0.00%	0.00%	0.00%	0.04%	0.00%	0.06%
ELECTRICAL 0.	.20%	0.44%	0.21%	0.41%	0.40%	0.57%	0.39%	0.92%	0.89%	0.79%	0.70%	0.63%
OTHER 0.	.24%	0.00%	0.00%	0.00%	0.05%	0.05%	0.06%	0.09%	0.00%	0.00%	0.16%	0.03%

- a. Reliability is 1 minus the return rate. The return rate is the average global monthly return rate October 2021 to September 2022.
- b. The number per month represent the unit that complete failure analysis in that month.





NAÍDA CI Q SERIES

The Naída $^{\text{\tiny M}}$ CI Q sound processors feature state-of-the-art technologies exclusively available from Advanced Bionics and Phonak for the best possible hearing experience.



RELIABILITY: 99.79%a



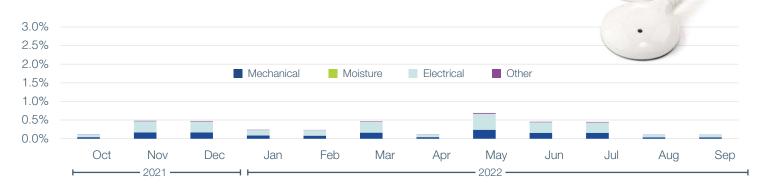
FAILED COMPONENT RETURN RATE^b

Cause	Oct 2021	Nov 2021	Dec 2021	Jan 2022	Feb 2022	Mar 2022	Apr 2022	May 2022	Jun 2022	Jul 2022	Aug 2022	Sep 2022
MECHANICAL	0.20%	0.05%	0.07%	0.12%	0.07%	0.07%	0.08%	0.04%	0.08%	0.06%	0.11%	0.08%
MOISTURE	0.05%	0.05%	0.04%	0.00%	0.03%	0.00%	0.00%	0.00%	0.01%	0.02%	0.01%	0.02%
ELECTRICAL	0.09%	0.13%	0.09%	0.07%	0.10%	0.12%	0.09%	0.08%	0.08%	0.12%	0.11%	0.05%
OTHER	0.00%	0.00%	0.01%	0.00%	0.01%	0.00%	0.01%	0.00%	0.00%	0.01%	0.00%	0.02%

CHORUS

The ChorusTM sound processor is compatible with C1.0 and C1.2 cochlear implants, and offers integrated RogerTM technology for connectivity and performance.

RELIABILITY: 99.74%^a



FAILED COMPONENT RETURN RATE^b

Cause	Oct 2021	Nov 2021	Dec 2021	Jan 2022	Feb 2022	Mar 2022	Apr 2022	May 2022	Jun 2022	Jul 2022	Aug 2022	Sep 2022
MECHANICAL	0.04%	0.17%	0.17%	0.08%	0.08%	0.16%	0.04%	0.24%	0.16%	0.16%	0.04%	0.04%
MOISTURE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ELECTRICAL	0.08%	0.30%	0.30%	0.15%	0.15%	0.29%	0.07%	0.43%	0.28%	0.28%	0.07%	0.07%
OTHER	0.00%	0.01%	0.01%	0.01%	0.01%	0.01%	0.00%	0.02%	0.01%	0.01%	0.00%	0.00%

NEPTUNE

The Neptune $^{\text{\tiny M}}$ sound processor is the first and only swimmable sound processor.

RELIABILITY: 99.93%^a





FAILED COMPONENT RETURN RATE^b

Cause	Oct 2021	Nov 2021	Dec 2021	Jan 2022	Feb 2022	Mar 2022	Apr 2022	May 2022	Jun 2022	Jul 2022	Aug 2022	Sep 2022
MECHANICAL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.01%	0.01%
MOISTURE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ELECTRICAL	0.00%	0.00%	0.05%	0.07%	0.00%	0.00%	0.09%	0.00%	0.12%	0.09%	0.03%	0.05%
OTHER	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

a. Reliability is 1 minus the return rate. The return rate is the average global monthly return rate October 2021 to September 2022.

b. The number per month represent the unit that complete failure analysis in that month.

HIRES ULTRA 3D v2

	Year	Medical CRP	Device CRP	Inconclusive CRP	Total All Catagorias	То	tal
	rear	Medical CRP	Device CRP	inconclusive CRP	Total All Categories	CI Higher	CI Lower
	1	0.73%	0.00%	0.00%	0.73%	0.90%	0.56%
ADULTS	1.5	0.79%	0.02%	0.00%	0.81%	0.99%	0.62%
ADULIS	2	1.06%	0.02%	0.00%	1.07%	1.34%	0.81%
	2.5	1.21%	0.02%	0.00%	1.22%	1.62%	0.83%
	1	0.68%	0.09%	0.00%	0.77%	1.10%	0.43%
CHILDREN	1.5	0.75%	0.09%	0.00%	0.84%	1.20%	0.47%
CHILDREN	2	0.75%	0.09%	0.00%	0.84%	1.20%	0.47%
	2.5a	N/A	N/A	N/A	N/A	N/A	N/A

HIRES ULTRA v2

	Year	Medical CRP	Device CRP	Inconclusive CRP	Total All Catagorica	Total		
	rear	Medical CRP	Device CRP	inconclusive CRP	Total All Categories	CI Higher	CI Lower	
	1	0.31%	0.00%	0.00%	0.31%	0.58%	0.04%	
ADULTS	1.5	0.31%	0.00%	0.00%	0.31%	0.58%	0.04%	
	2 ^a	N/A	N/A	N/A	N/A	N/A	N/A	
	1	0.22%	0.05%	0.00%	0.27%	0.52%	0.03%	
CHILDREN	1.5	0.22%	0.05%	0.00%	0.27%	0.52%	0.03%	
	2 ^a	N/A	N/A	N/A	N/A	N/A	N/A	

HIRES ULTRA 3D V1

	Year	Medical CRP	Davies CDD	Inconclusive CRP	Tatal All Catagorias	То	tal
	rear	Medical CRP	Device CRP	inconclusive CRP	Total All Categories	CI Higher	CI Lower
	1	0.93%	0.13%	0.02%	1.08%	1.36%	0.80%
	1.5	1.37%	0.71%	0.10%	2.17%	2.57%	1.78%
ADULTS	2	1.70%	2.40%	0.18%	4.23%	4.78%	3.69%
ADULIS	2.5	2.06%	4.83%	0.20%	6.97%	7.66%	6.28%
	3	2.35%	6.93%	0.20%	9.29%	10.09%	8.49%
	3.5	2.40%	9.29%	0.20%	11.64%	12.62%	10.67%
	1	1.05%	0.49%	0.00%	1.54%	2.18%	0.90%
	1.5	1.48%	2.20%	0.00%	3.64%	4.61%	2.67%
CHILDREN	2	1.93%	7.43%	0.07%	9.28%	10.79%	7.77%
CHILDREN	2.5	2.65%	12.62%	0.07%	15.00%	16.86%	13.14%
	3	3.53%	18.08%	0.07%	21.03%	23.22%	18.85%
	3.5ª	N/A	N/A	N/A	N/A	N/A	N/A

HIRES ULTRA V1

	Year	Medical CRP	Device CRP	Inconclusive CRP	Total All Catagorias	То	tal
	rear	Medical CRP	Device CRP	inconclusive CRP	Total All Categories	CI Higher	CI Lower
	1	0.77%	0.02%	0.02%	0.81%	1.00%	0.62%
	2	1.30%	0.42%	0.05%	1.77%	2.04%	1.49%
ADULTS	3	1.75%	3.12%	0.11%	4.93%	5.39%	4.47%
	4	1.99%	8.80%	0.17%	10.77%	11.46%	10.07%
	5	2.08%	14.34%	0.17%	16.26%	17.23%	15.30%
	1	0.56%	0.13%	0.00%	0.69%	0.95%	0.43%
	2	0.82%	1.29%	0.05%	2.15%	2.60%	1.69%
CHILDREN	3	1.09%	6.39%	0.11%	7.52%	8.36%	6.68%
	4	1.72%	16.69%	0.11%	18.21%	19.62%	16.79%
	5	1.80%	25.58%	0.19%	27.06%	29.00%	25.13%

a. Sample size is not large enough for reporting

HIRES 90K ADVANTAGE

	V	Madiaal CDD	Davies CDD	less and less on ODD	Tatal All Catagorias	То	tal
	Year	Medical CRP	Device CRP	Inconclusive CRP	Total All Categories	CI Higher	CI Lower
	1	0.68%	0.07%	0.02%	0.76%	0.88%	0.64%
	2	1.16%	0.09%	0.03%	1.27%	1.43%	1.11%
	3	1.43%	0.14%	0.04%	1.60%	1.77%	1.42%
	4	1.71%	0.18%	0.04%	1.93%	2.12%	1.73%
ADULTS	5	1.96%	0.20%	0.04%	2.19%	2.40%	1.98%
	6	2.08%	0.24%	0.04%	2.35%	2.57%	2.13%
	7	2.22%	0.24%	0.05%	2.50%	2.73%	2.27%
	8	2.33%	0.28%	0.05%	2.65%	2.89%	2.40%
	9	2.38%	0.33%	0.05%	2.75%	3.01%	2.49%
	1	0.76%	0.20%	0.03%	0.99%	1.13%	0.85%
	2	1.08%	0.38%	0.04%	1.49%	1.67%	1.32%
	3	1.35%	0.57%	0.05%	1.96%	2.16%	1.76%
	4	1.57%	0.73%	0.09%	2.38%	2.60%	2.16%
CHILDREN	5	1.72%	0.88%	0.13%	2.71%	2.95%	2.47%
	6	1.91%	1.00%	0.13%	3.02%	3.28%	2.75%
	7	2.02%	1.17%	0.16%	3.32%	3.61%	3.03%
	8	2.14%	1.29%	0.18%	3.58%	3.91%	3.26%
	9	2.19%	1.51%	0.27%	3.92%	4.32%	3.52%

HIRES 90K vendor A post-mod

	Voor	Madical CDD	Davies CDD	Inconclusive CRP	Total All Catagorias	To	tal
	Year	Medical CRP	Device CRP	inconclusive CRP	Total All Categories	Cl Higher	CI Lower
	1	0.78%	0.07%	0.02%	0.87%	0.96%	0.78%
	2	1.30%	0.11%	0.04%	1.45%	1.57%	1.33%
	3	1.60%	0.17%	0.06%	1.83%	1.96%	1.69%
	4	1.87%	0.24%	0.08%	2.19%	2.33%	2.04%
	5	2.11%	0.28%	0.09%	2.47%	2.63%	2.32%
	6	2.25%	0.34%	0.10%	2.69%	2.85%	2.53%
	7	2.40%	0.36%	0.11%	2.86%	3.03%	2.70%
	8	2.54%	0.44%	0.12%	3.08%	3.26%	2.90%
ADULTS	9	2.65%	0.48%	0.12%	3.24%	3.42%	3.05%
	10	2.76%	0.54%	0.13%	3.42%	3.61%	3.23%
	11	2.88%	0.58%	0.13%	3.58%	3.78%	3.38%
	12	2.99%	0.60%	0.14%	3.71%	3.92%	3.50%
	13	3.12%	0.62%	0.16%	3.86%	4.09%	3.64%
	14	3.22%	0.64%	0.17%	4.00%	4.24%	3.77%
	15	3.33%	0.64%	0.17%	4.11%	4.36%	3.87%
	16	3.39%	0.73%	0.17%	4.26%	4.53%	3.98%
	17	3.47%	0.73%	0.17%	4.33%	4.65%	4.02%
	1	0.78%	0.20%	0.03%	1.00%	1.10%	0.91%
	2	1.10%	0.45%	0.04%	1.58%	1.71%	1.46%
	3	1.35%	0.72%	0.06%	2.11%	2.26%	1.97%
	4	1.55%	0.96%	0.08%	2.57%	2.73%	2.41%
	5	1.72%	1.18%	0.11%	2.99%	3.16%	2.82%
	6	1.87%	1.34%	0.12%	3.30%	3.48%	3.12%
	7	1.98%	1.46%	0.14%	3.55%	3.74%	3.36%
	8	2.06%	1.61%	0.16%	3.79%	4.00%	3.59%
CHILDREN	9	2.17%	1.72%	0.18%	4.03%	4.24%	3.82%
	10	2.40%	1.87%	0.22%	4.43%	4.67%	4.20%
	11	2.57%	1.90%	0.24%	4.65%	4.90%	4.40%
	12	2.75%	2.00%	0.29%	4.97%	5.25%	4.70%
	13	2.91%	2.03%	0.29%	5.15%	5.44%	4.86%
	14	3.05%	2.13%	0.31%	5.41%	5.73%	5.09%
	15	3.21%	2.19%	0.37%	5.67%	6.03%	5.32%
	16	3.26%	2.29%	0.42%	5.86%	6.27%	5.46%
	17 ^a	N/A	N/A	N/A	N/A	N/A	N/A

HIRES 90K vendor A all

		M !: 1000	D : 000		T. 14110 : :	То	tal
	Year	Medical CRP	Device CRP	Inconclusive CRP	Total All Categories	CI Higher	CI Lower
	1	0.78%	0.08%	0.01%	0.87%	0.96%	0.78%
	2	1.29%	0.14%	0.05%	1.47%	1.59%	1.36%
	3	1.59%	0.21%	0.08%	1.87%	2.00%	1.74%
	4	1.86%	0.31%	0.10%	2.26%	2.41%	2.12%
	5	2.10%	0.37%	0.11%	2.56%	2.71%	2.41%
	6	2.24%	0.45%	0.13%	2.80%	2.96%	2.64%
	7	2.39%	0.48%	0.14%	2.99%	3.16%	2.82%
	8	2.53%	0.58%	0.14%	3.23%	3.41%	3.05%
ADULTS	9	2.63%	0.67%	0.15%	3.43%	3.61%	3.24%
ADULIS	10	2.74%	0.76%	0.16%	3.64%	3.83%	3.44%
	11	2.86%	0.83%	0.16%	3.82%	4.03%	3.62%
	12	2.99%	0.89%	0.17%	4.01%	4.22%	3.79%
	13	3.10%	0.93%	0.19%	4.19%	4.42%	3.96%
	14	3.24%	1.02%	0.20%	4.42%	4.66%	4.18%
	15	3.34%	1.06%	0.20%	4.56%	4.81%	4.30%
	16	3.42%	1.16%	0.20%	4.74%	5.02%	4.45%
	17	3.53%	1.30%	0.24%	5.01%	5.35%	4.67%
	18	3.59%	1.30%	0.24%	5.08%	5.44%	4.71%
	1	0.79%	0.21%	0.03%	1.03%	1.12%	0.93%
	2	1.11%	0.47%	0.04%	1.61%	1.74%	1.49%
	3	1.37%	0.75%	0.06%	2.16%	2.31%	2.02%
	4	1.57%	1.01%	0.08%	2.64%	2.80%	2.48%
	5	1.74%	1.24%	0.12%	3.07%	3.24%	2.90%
	6	1.88%	1.42%	0.13%	3.40%	3.59%	3.22%
	7	2.01%	1.57%	0.16%	3.69%	3.89%	3.50%
	8	2.11%	1.74%	0.18%	3.98%	4.19%	3.78%
CHILDREN	9	2.21%	1.87%	0.19%	4.22%	4.44%	4.01%
CHILDREN	10	2.44%	2.04%	0.24%	4.65%	4.89%	4.41%
	11	2.62%	2.09%	0.26%	4.91%	5.16%	4.66%
	12	2.79%	2.27%	0.32%	5.29%	5.57%	5.01%
	13	2.93%	2.33%	0.32%	5.49%	5.78%	5.19%
	14	3.05%	2.53%	0.33%	5.82%	6.14%	5.49%
	15	3.23%	2.66%	0.38%	6.16%	6.53%	5.80%
	16	3.27%	2.92%	0.41%	6.48%	6.89%	6.06%
	17	3.33%	3.05%	0.41%	6.67%	7.14%	6.20%
	18	3.58%	3.17%	0.41%	7.03%	7.65%	6.41%

HIRES 90K vendor A pre-mod

	Year	Medical CRP	Device CRP	Inconclusive CRP	Total All Categories	То	tal
	rear	Medical CRP	Device CRP	Inconclusive CRP	Total All Categories	CI Higher	CI Lower
	1	0.60%	0.42%	0.00%	1.02%	1.51%	0.54%
	2	1.03%	0.85%	0.24%	2.11%	2.80%	1.42%
	3	1.33%	1.09%	0.49%	2.89%	3.70%	2.09%
	4	1.58%	1.89%	0.55%	3.98%	4.92%	3.04%
	5	1.70%	2.32%	0.62%	4.58%	5.59%	3.57%
	6	1.83%	2.76%	0.68%	5.18%	6.25%	4.12%
	7	2.14%	3.00%	0.74%	5.79%	6.91%	4.66%
	8	2.20%	3.56%	0.74%	6.39%	7.57%	5.21%
ADILLEC	9	2.27%	4.25%	0.74%	7.11%	8.35%	5.88%
ADULTS	10	2.39%	4.62%	0.81%	7.66%	8.94%	6.38%
	11	2.46%	5.00%	0.81%	8.08%	9.39%	6.77%
	12	2.72%	5.44%	0.81%	8.75%	10.11%	7.39%
	13	2.78%	5.69%	0.87%	9.11%	10.49%	7.72%
	14	3.11%	6.13%	0.87%	9.84%	11.27%	8.40%
	15	3.17%	6.32%	0.87%	10.08%	11.53%	8.63%
	16	3.30%	6.44%	0.87%	10.32%	11.79%	8.86%
	17	3.43%	6.70%	0.94%	10.75%	12.24%	9.26%
	18	3.51%	6.70%	0.94%	10.82%	12.31%	9.32%

	Year	Madical CDD	edical CRP Device CRP	Inconclusive CRP	Total All Categories	Total	
	rear	iviedical CRP				CI Higher	CI Lower
	1	1.25%	0.80%	0.00%	2.03%	2.96%	1.10%
	2	1.48%	1.37%	0.12%	2.94%	4.05%	1.83%
	3	2.06%	2.18%	0.23%	4.41%	5.77%	3.06%
	4	2.41%	3.11%	0.23%	5.66%	7.19%	4.14%
	5	2.52%	3.93%	0.35%	6.69%	8.34%	5.04%
	6	2.64%	4.75%	0.48%	7.71%	9.47%	5.95%
	7	3.13%	5.57%	0.72%	9.19%	11.10%	7.28%
	8	3.74%	6.52%	0.72%	10.67%	12.70%	8.63%
CHILDREN	9	3.74%	6.88%	0.72%	11.01%	13.07%	8.94%
CHILDREN	10	3.86%	7.48%	0.85%	11.80%	13.93%	9.67%
	11	4.23%	7.84%	0.98%	12.60%	14.79%	10.41%
	12	4.23%	8.80%	0.98%	13.51%	15.77%	11.26%
	13	4.23%	9.16%	0.98%	13.86%	16.14%	11.57%
	14	4.23%	10.00%	0.98%	14.66%	16.99%	12.32%
	15	4.49%	10.49%	0.98%	15.34%	17.72%	12.96%
	16	4.49%	11.09%	0.98%	15.91%	18.33%	13.50%
	17	4.49%	11.33%	0.98%	16.14%	18.58%	13.71%
	18	4.64%	11.48%	0.98%	16.41%	18.87%	13.96%

HIRES 90K vendor B

	\/ · ·	Madiaal CDD	Davies CDD	las analysis CDD	ODD THE ALLOW	То	tal
	Year	Medical CRP	Device CRP	Inconclusive CRP	Total All Categories	CI Higher	CI Lower
	1	0.95%	3.03%	0.00%	3.95%	4.71%	3.20%
	2	1.33%	10.84%	0.09%	12.10%	13.37%	10.84%
	3	1.56%	16.18%	0.18%	17.63%	19.11%	16.16%
	4	1.85%	20.67%	0.18%	22.28%	23.90%	20.67%
	5	1.95%	24.35%	0.23%	25.99%	27.70%	24.29%
	6	2.06%	26.69%	0.23%	28.37%	30.12%	26.61%
	7	2.17%	29.65%	0.23%	31.33%	33.14%	29.53%
	8	2.45%	31.52%	0.23%	33.35%	35.19%	31.52%
ADULTS	9	2.45%	33.11%	0.23%	34.90%	36.75%	33.05%
ADULIS	10	2.63%	34.54%	0.23%	36.41%	38.28%	34.54%
	11	2.63%	35.44%	0.23%	37.28%	39.17%	35.40%
	12	2.70%	36.75%	0.23%	38.60%	40.49%	36.70%
	13	2.76%	37.78%	0.23%	39.64%	41.54%	37.73%
	14	2.89%	38.56%	0.23%	40.47%	42.39%	38.56%
	15	2.96%	39.22%	0.23%	41.15%	43.07%	39.24%
	16	3.02%	39.68%	0.23%	41.63%	43.55%	39.71%
	17	3.10%	40.37%	0.31%	42.40%	44.33%	40.47%
	18	3.10%	40.87%	0.31%	42.89%	44.84%	40.93%
	1	0.88%	3.28%	0.00%	4.13%	5.14%	3.13%
	2	1.31%	11.53%	0.07%	12.76%	14.45%	11.07%
	3	1.55%	19.83%	0.07%	21.13%	23.20%	19.06%
	4	1.55%	25.85%	0.07%	27.06%	29.31%	24.80%
	5	1.93%	30.52%	0.17%	31.98%	34.35%	29.61%
	6	2.13%	34.46%	0.17%	35.97%	38.40%	33.53%
	7	2.13%	37.71%	0.17%	39.14%	41.62%	36.66%
	8	2.35%	40.34%	0.17%	41.84%	44.35%	39.34%
CHILDREN	9	2.47%	42.70%	0.17%	44.21%	46.74%	41.69%
CHILDREIN	10	2.47%	44.37%	0.17%	45.84%	48.37%	43.31%
	11	2.71%	45.49%	0.17%	47.06%	49.60%	44.52%
	12	3.09%	46.33%	0.43%	48.21%	50.75%	45.67%
	13	3.09%	47.88%	0.43%	49.70%	52.25%	47.16%
	14	3.22%	48.44%	0.56%	50.38%	52.93%	47.84%
	15	3.22%	49.36%	0.56%	51.27%	53.81%	48.72%
	16	3.22%	49.64%	0.70%	51.61%	54.15%	49.06%
	17	3.55%	50.58%	0.70%	52.67%	55.23%	50.12%
	18ª	N/A	N/A	N/A	N/A	N/A	N/A

CII BIONIC EAR

	Year	Medical CRP	Device CRP	Inconclusive CRP	Total All Categories		tal
	Teal	Medical One	Device OnF	Inconclusive Onr	Iotal All Categories	Cl Higher	CI Lower
	1	0.38%	0.38%	0.03%	0.80%	1.10%	0.50%
	2	0.65%	0.41%	0.18%	1.24%	1.61%	0.87%
	3	0.89%	0.59%	0.30%	1.77%	2.21%	1.33%
	4	1.19%	0.65%	0.39%	2.21%	2.71%	1.72%
	5	1.37%	0.74%	0.42%	2.51%	3.03%	1.98%
	6	1.46%	0.89%	0.48%	2.80%	3.36%	2.25%
	7	1.58%	0.95%	0.66%	3.16%	3.75%	2.57%
	8	1.70%	1.04%	0.75%	3.46%	4.07%	2.84%
	9	1.91%	1.14%	0.81%	3.81%	4.46%	3.17%
	10	2.03%	1.20%	0.81%	3.99%	4.65%	3.33%
ADULTS	11	2.12%	1.29%	0.84%	4.20%	4.87%	3.52%
	12	2.33%	1.29%	0.87%	4.43%	5.13%	3.74%
	13	2.39%	1.29%	0.87%	4.49%	5.19%	3.79%
	14	2.45%	1.38%	0.87%	4.64%	5.35%	3.93%
	15	2.54%	1.44%	0.87%	4.79%	5.51%	4.07%
	16	2.60%	1.50%	0.87%	4.91%	5.64%	4.18%
	17	2.67%	1.56%	0.87%	5.03%	5.76%	4.29%
	18	2.76%	1.60%	0.94%	5.21%	5.95%	4.46%
	19	2.91%	1.66%	0.94%	5.42%	6.18%	4.66%
	20	3.10%	1.66%	0.94%	5.60%	6.38%	4.83%
	21	3.31%	1.87%	0.94%	6.00%	6.84%	5.16%
	1	0.23%	0.76%	0.06%	1.05%	1.53%	0.57%
	2	0.71%	1.40%	0.24%	2.33%	3.05%	1.62%
	3	1.30%	2.29%	0.30%	3.85%	4.76%	2.94%
	4	1.30%	2.77%	0.42%	4.44%	5.41%	3.46%
	5	1.61%	3.25%	0.72%	5.49%	6.57%	4.41%
	6	1.85%	4.03%	1.03%	6.78%	7.97%	5.59%
	7	1.98%	4.57%	1.16%	7.54%	8.79%	6.29%
	8	2.10%	5.00%	1.47%	8.36%	9.67%	7.05%
	9	2.29%	5.42%	1.60%	9.07%	10.43%	7.70%
	10	2.48%	5.79%	1.60%	9.59%	10.99%	8.20%
CHILDREN	11	2.61%	5.91%	1.79%	10.00%	11.43%	8.58%
	12	2.92%	6.03%	1.86%	10.47%	11.93%	9.02%
	13	3.24%	6.16%	1.92%	10.94%	12.42%	9.46%
	14	3.37%	6.41%	1.98%	11.36%	12.86%	9.85%
	15	3.43%	6.47%	1.98%	11.47%	12.98%	9.96%
	16	3.63%	6.53%	2.05%	11.77%	13.30%	10.24%
	17	3.88%	6.59%	2.18%	12.18%	13.73%	10.63%
	18	3.95%	6.72%	2.25%	12.41%	13.98%	10.85%
	19	4.58%	6.85%	2.25%	13.11%	14.72%	11.51%
	20	4.93%	6.85%	2.34%	13.52%	15.15%	11.88%
	21ª	N/A	N/A	N/A	N/A	N/A	N/A

a. Sample size is not large enough for reporting

CLARION 1.2

	Year	Medical CRP	Device CRP	Inconclusive CRP	Total All Categories	То	tal
	rear	iviedical Chr	Device Chr	inconclusive one	Total All Categories	CI Higher	CI Lower
	1	0.28%	0.28%	0.14%	0.71%	0.94%	0.48%
	2	0.39%	0.59%	0.22%	1.20%	1.50%	0.89%
	3	0.57%	1.27%	0.33%	2.15%	2.56%	1.75%
	4	0.78%	2.32%	0.49%	3.56%	4.08%	3.04%
	5	0.93%	3.60%	0.64%	5.11%	5.73%	4.50%
	6	1.10%	4.62%	0.73%	6.36%	7.04%	5.67%
	7	1.17%	5.49%	0.82%	7.36%	8.09%	6.63%
	8	1.36%	6.66%	0.95%	8.81%	9.60%	8.01%
	9	1.52%	7.35%	1.08%	9.75%	10.58%	8.92%
	10	1.77%	8.28%	1.29%	11.06%	11.94%	10.18%
	11	1.92%	9.02%	1.38%	12.00%	12.91%	11.09%
	12	2.22%	9.51%	1.58%	12.93%	13.87%	11.99%
ADULTS	13	2.41%	9.96%	1.63%	13.56%	14.52%	12.60%
	14	2.59%	10.35%	1.73%	14.18%	15.16%	13.20%
	15	2.88%	10.78%	1.80%	14.90%	15.90%	13.90%
	16	3.23%	11.15%	1.87%	15.62%	16.64%	14.60%
	17	3.63%	11.60%	1.94%	16.46%	17.50%	15.42%
	18	4.35%	11.95%	1.94%	17.41%	18.48%	16.35%
	19	4.80%	12.29%	2.04%	18.20%	19.28%	17.12%
	20	5.42%	12.49%	2.12%	18.98%	20.08%	17.88%
	21	5.95%	12.68%	2.17%	19.65%	20.77%	18.54%
	22	6.34%	12.91%	2.25%	20.27%	21.40%	19.14%
	23	7.28%	13.15%	2.29%	21.32%	22.49%	20.15%
	24	7.78%	13.36%	2.35%	21.98%	23.19%	20.77%
	25	7.97%	13.44%	2.55%	22.37%	23.63%	21.12%
	1	0.23%	1.68%	0.11%	2.02%	2.48%	1.55%
	2	0.38%	3.09%	0.20%	3.65%	4.27%	3.03%
	3	0.53%	5.25%	0.41%	6.14%	6.93%	5.34%
	4	0.77%	7.63%	0.54%	8.84%	9.78%	7.90%
	5	0.96%	9.95%	0.92%	11.63%	12.70%	10.57%
	6	1.26%	12.40%	1.21%	14.55%	15.72%	13.38%
	7	1.63%	14.30%	1.49%	16.95%	18.20%	15.70%
	8	1.91%	16.43%	1.83%	19.53%	20.85%	18.21%
	9	2.23%	17.76%	2.26%	21.42%	22.78%	20.05%
	10	2.49%	19.35%	2.81%	23.57%	24.98%	22.16%
	11	2.75%	20.46%	3.19%	25.11%	26.56%	23.67%
	12	2.98%	21.18%	3.45%	26.16%	27.63%	24.70%
CHILDREN	13	3.25%	21.83%	3.68%	27.16%	28.64%	25.67%
	14	3.56%	22.46%	3.80%	28.06%	29.56%	26.57%
	15	4.08%	23.60%	4.04%	29.67%	31.20%	28.15%
	16	4.84%	24.44%	4.36%	31.23%	32.78%	29.69%
	17	5.42%	25.05%	4.77%	32.50%	34.06%	30.93%
	18	6.50%	25.68%	4.98%	33.98%	35.56%	32.39%
	19	7.73%	26.15%	5.16%	35.37%	36.97%	33.78%
	20	9.08%	26.51%	5.34%	36.75%	38.36%	35.14%
	21	10.02%	26.89%	5.53%	37.86%	39.48%	36.23%
	22	11.26%	27.59%	5.76%	39.44%	41.10%	37.79%
	23	12.10%	28.05%	5.91%	40.50%	42.18%	38.81%
	24	13.18%	28.66%	6.14%	41.87%	43.62%	40.11%
	25	14.09%	29.12%	6.34%	42.97%	44.83%	41.11%

CONTACT US

This report is intended to provide both professionals and our CI recipients with relevant information on the reliability of our products. If you have any questions, please contact us by emailing hear@AdvancedBionics.com or visit AdvancedBionics.com for more general information.



ADVANCED BIONICS LLC

28515 Westinghouse Place Valencia, CA 91355, United States T: +1.877.829.0026 T: +1.661.362.1400 F: +1.661.362.1500

ADVANCED BIONICS AG

info.us@advancedbionics.com

Laubisrütistrasse 28 8712 Stäfa, Switzerland T: +41.58.928.78.00 F: +41.58.928.78.90 info.switzerland@advancedbionics.com

For information on additional AB locations, please visit advancedbionics.com/contact

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