

**Bespoke Implant Report for:**

DePuy

**CRR for selected implant combinations for different age groups**

Comprising PRIMARY hips implanted up to: 02 June 2019

NJR Database extract: 01 August 2019

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This report has been produced by the National Joint Registry of England, Wales and Northern Ireland (NJR). It summarises the cumulative revision rate of selected implant combinations in primary hips, based on data collected by the NJR.

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All groups exclude metal-on-metal and ceramic-on-metal bearings

## Cumulative Revision Rate

### Group 1: Corail Collared - Pinnacle

| Time / years | Age < 55                 | Age 55-64                | Age 65 - 74              | Age > 75                 |
|--------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1            | 0.80 % (0.64 % - 0.98 %) | 0.61 % (0.51 % - 0.73 %) | 0.51 % (0.43 % - 0.59 %) | 0.74 % (0.62 % - 0.86 %) |
| 2            | 1.35 % (1.13 % - 1.59 %) | 0.99 % (0.85 % - 1.13 %) | 0.79 % (0.68 % - 0.90 %) | 0.94 % (0.81 % - 1.09 %) |
| 3            | 1.96 % (1.68 % - 2.26 %) | 1.28 % (1.11 % - 1.45 %) | 1.02 % (0.89 % - 1.14 %) | 1.11 % (0.96 % - 1.27 %) |
| 4            | 2.53 % (2.19 % - 2.88 %) | 1.52 % (1.34 % - 1.72 %) | 1.15 % (1.02 % - 1.30 %) | 1.22 % (1.05 % - 1.39 %) |
| 5            | 2.80 % (2.44 % - 3.19 %) | 1.69 % (1.49 % - 1.91 %) | 1.29 % (1.14 % - 1.45 %) | 1.36 % (1.18 % - 1.57 %) |
| 6            | 3.04 % (2.65 % - 3.48 %) | 1.86 % (1.64 % - 2.10 %) | 1.39 % (1.23 % - 1.56 %) | 1.47 % (1.27 % - 1.69 %) |
| 7            | 3.27 % (2.83 % - 3.74 %) | 2.05 % (1.80 % - 2.32 %) | 1.50 % (1.32 % - 1.70 %) | 1.59 % (1.37 % - 1.85 %) |
| 8            | 3.49 % (3.01 % - 4.05 %) | 2.25 % (1.96 % - 2.57 %) | 1.59 % (1.39 % - 1.80 %) | 1.82 % (1.53 % - 2.15 %) |
| 9            | 4.01 % (3.40 % - 4.74 %) | 2.53 % (2.18 % - 2.92 %) | 1.80 % (1.54 % - 2.09 %) | 1.99 % (1.63 % - 2.43 %) |
| 10           | 4.35 % (3.61 % - 5.28 %) | 2.70 % (2.28 % - 3.19 %) | 2.03 % (1.68 % - 2.45 %) | 2.13 % (1.70 % - 2.82 %) |
| 11           | 4.62 % (3.75 % - 5.80 %) | 2.93 % (2.43 % - 3.64 %) | 2.47 % (1.84 % - 3.20 %) | 2.64 % (1.74 % - 4.05 %) |
| 12           | 5.56 % (3.82 % - 7.61 %) | 3.23 % (2.52 % - 4.09 %) | 3.11 % (2.15 % - 4.49 %) |                          |
| 13           | 5.56 % (3.82 % - 8.76 %) | 3.98 % (2.86 % - 5.83 %) | 3.98 % (2.38 % - 6.75 %) |                          |
| 14           |                          |                          |                          |                          |

### Group 2: C-Stem AMT - Pinnacle

| Time / years | Age < 55                 | Age 55-64                | Age 65 - 74              | Age > 75                 |
|--------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1            | 0.59 % (0.25 % - 1.12 %) | 0.51 % (0.28 % - 0.82 %) | 0.64 % (0.46 % - 0.86 %) | 0.80 % (0.59 % - 1.06 %) |
| 2            | 0.88 % (0.42 % - 1.58 %) | 0.80 % (0.49 % - 1.22 %) | 0.85 % (0.62 % - 1.11 %) | 1.13 % (0.85 % - 1.45 %) |
| 3            | 1.06 % (0.52 % - 1.90 %) | 0.97 % (0.60 % - 1.44 %) | 1.03 % (0.77 % - 1.33 %) | 1.53 % (1.17 % - 1.93 %) |
| 4            | 1.39 % (0.68 % - 2.37 %) | 1.34 % (0.84 % - 1.96 %) | 1.17 % (0.87 % - 1.52 %) | 1.66 % (1.27 % - 2.10 %) |
| 5            | 2.07 % (1.07 % - 3.66 %) | 1.78 % (1.14 % - 2.65 %) | 1.35 % (1.00 % - 1.78 %) | 1.66 % (1.27 % - 2.22 %) |
| 6            | 2.07 % (1.07 % - 3.92 %) | 2.25 % (1.43 % - 3.29 %) | 1.55 % (1.13 % - 2.05 %) | 1.66 % (1.27 % - 2.37 %) |
| 7            | 2.07 % (1.07 % - 4.23 %) | 2.85 % (1.80 % - 4.21 %) | 1.67 % (1.21 % - 2.30 %) | 1.66 % (1.27 % - 2.59 %) |
| 8            | 3.23 % (1.43 % - 5.97 %) | 3.68 % (2.29 % - 5.41 %) | 1.86 % (1.31 % - 2.60 %) | 2.03 % (1.33 % - 3.08 %) |
| 9            | 3.23 % (1.43 % - 6.73 %) | 3.68 % (2.29 % - 5.74 %) | 1.86 % (1.31 % - 2.74 %) | 2.03 % (1.33 % - 3.47 %) |
| 10           |                          | 3.68 % (2.29 % - 6.01 %) | 2.30 % (1.44 % - 3.50 %) | 2.03 % (1.33 % - 3.85 %) |
| 11           |                          | 3.68 % (2.29 % - 6.27 %) | 2.91 % (1.67 % - 4.73 %) |                          |
| 12           |                          | 3.68 % (2.29 % - 6.78 %) | 2.91 % (1.67 % - 5.35 %) |                          |
| 13           |                          |                          |                          |                          |
| 14           |                          |                          |                          |                          |

Cumulative revision rate with 95% confidence intervals

Rate is only reported for times where more than 40 remain at risk

Endpoint: Revision for any reason

## Cumulative Revision Rate

### Group 3: C-Stem AMT - Marathon

| Time / years | Age < 55                 | Age 55-64                | Age 65 - 74              | Age > 75                 |
|--------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1            | 0.81 % (0.20 % - 2.04 %) | 0.90 % (0.45 % - 1.54 %) | 0.48 % (0.30 % - 0.71 %) | 0.34 % (0.22 % - 0.50 %) |
| 2            | 0.81 % (0.20 % - 2.24 %) | 1.21 % (0.65 % - 1.96 %) | 0.70 % (0.46 % - 0.99 %) | 0.62 % (0.44 % - 0.84 %) |
| 3            | 1.59 % (0.48 % - 3.58 %) | 1.58 % (0.89 % - 2.51 %) | 0.97 % (0.67 % - 1.35 %) | 0.82 % (0.59 % - 1.10 %) |
| 4            | 1.59 % (0.48 % - 3.87 %) | 1.58 % (0.89 % - 2.67 %) | 1.17 % (0.82 % - 1.63 %) | 0.93 % (0.66 % - 1.24 %) |
| 5            | 1.59 % (0.48 % - 4.70 %) | 2.30 % (1.28 % - 3.71 %) | 1.17 % (0.82 % - 1.77 %) | 1.08 % (0.76 % - 1.54 %) |
| 6            |                          | 2.30 % (1.28 % - 4.00 %) | 1.17 % (0.82 % - 1.92 %) | 1.45 % (0.93 % - 2.18 %) |
| 7            |                          | 2.30 % (1.28 % - 4.38 %) | 1.45 % (0.90 % - 2.22 %) | 1.71 % (1.06 % - 2.83 %) |
| 8            |                          | 2.30 % (1.28 % - 5.30 %) | 1.45 % (0.90 % - 2.53 %) | 1.71 % (1.06 % - 3.39 %) |
| 9            |                          |                          | 1.45 % (0.90 % - 3.00 %) |                          |
| 10           |                          |                          |                          |                          |
| 11           |                          |                          |                          |                          |
| 12           |                          |                          |                          |                          |
| 13           |                          |                          |                          |                          |
| 14           |                          |                          |                          |                          |

### Group 4: All cementless hips

| Time / years | Age < 55                 | Age 55-64                | Age 65 - 74              | Age > 75                 |
|--------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1            | 0.92 % (0.85 % - 0.99 %) | 0.85 % (0.79 % - 0.90 %) | 0.89 % (0.84 % - 0.94 %) | 1.25 % (1.17 % - 1.32 %) |
| 2            | 1.47 % (1.38 % - 1.57 %) | 1.30 % (1.23 % - 1.37 %) | 1.23 % (1.17 % - 1.29 %) | 1.54 % (1.46 % - 1.63 %) |
| 3            | 1.94 % (1.83 % - 2.05 %) | 1.65 % (1.57 % - 1.73 %) | 1.50 % (1.43 % - 1.56 %) | 1.75 % (1.66 % - 1.84 %) |
| 4            | 2.33 % (2.20 % - 2.45 %) | 1.91 % (1.82 % - 2.00 %) | 1.69 % (1.62 % - 1.76 %) | 1.95 % (1.85 % - 2.05 %) |
| 5            | 2.73 % (2.59 % - 2.87 %) | 2.15 % (2.06 % - 2.25 %) | 1.90 % (1.82 % - 1.98 %) | 2.10 % (2.00 % - 2.21 %) |
| 6            | 3.16 % (3.00 % - 3.32 %) | 2.41 % (2.30 % - 2.51 %) | 2.14 % (2.05 % - 2.23 %) | 2.27 % (2.16 % - 2.39 %) |
| 7            | 3.49 % (3.31 % - 3.67 %) | 2.72 % (2.60 % - 2.83 %) | 2.32 % (2.23 % - 2.42 %) | 2.52 % (2.39 % - 2.65 %) |
| 8            | 3.85 % (3.66 % - 4.05 %) | 3.03 % (2.91 % - 3.16 %) | 2.59 % (2.49 % - 2.70 %) | 2.79 % (2.65 % - 2.94 %) |
| 9            | 4.17 % (3.95 % - 4.39 %) | 3.38 % (3.23 % - 3.53 %) | 2.89 % (2.77 % - 3.01 %) | 3.06 % (2.89 % - 3.23 %) |
| 10           | 4.58 % (4.33 % - 4.84 %) | 3.76 % (3.59 % - 3.93 %) | 3.26 % (3.12 % - 3.41 %) | 3.40 % (3.19 % - 3.61 %) |
| 11           | 5.11 % (4.81 % - 5.43 %) | 4.22 % (4.02 % - 4.42 %) | 3.65 % (3.48 % - 3.82 %) | 3.68 % (3.44 % - 3.94 %) |
| 12           | 5.57 % (5.20 % - 5.95 %) | 4.72 % (4.48 % - 4.97 %) | 4.10 % (3.89 % - 4.32 %) | 3.88 % (3.59 % - 4.19 %) |
| 13           | 6.00 % (5.56 % - 6.46 %) | 5.18 % (4.89 % - 5.49 %) | 4.59 % (4.32 % - 4.88 %) | 4.41 % (3.97 % - 4.88 %) |
| 14           | 6.97 % (6.33 % - 7.64 %) | 6.01 % (5.60 % - 6.44 %) | 4.94 % (4.61 % - 5.30 %) | 4.74 % (4.18 % - 5.45 %) |

Cumulative revision rate with 95% confidence intervals

Rate is only reported for times where more than 40 remain at risk

Endpoint: Revision for any reason

## Cumulative Revision Rate

## Group 5: All Hybrid Hips

| Time / years | Age < 55                 | Age 55-64                | Age 65 - 74              | Age > 75                 |
|--------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1            | 0.78 % (0.67 % - 0.90 %) | 0.68 % (0.60 % - 0.75 %) | 0.78 % (0.72 % - 0.84 %) | 0.81 % (0.75 % - 0.87 %) |
| 2            | 1.17 % (1.03 % - 1.32 %) | 1.00 % (0.91 % - 1.09 %) | 1.05 % (0.98 % - 1.12 %) | 1.03 % (0.96 % - 1.10 %) |
| 3            | 1.41 % (1.25 % - 1.58 %) | 1.24 % (1.14 % - 1.35 %) | 1.25 % (1.18 % - 1.33 %) | 1.25 % (1.18 % - 1.33 %) |
| 4            | 1.65 % (1.47 % - 1.84 %) | 1.49 % (1.38 % - 1.62 %) | 1.46 % (1.37 % - 1.54 %) | 1.49 % (1.40 % - 1.58 %) |
| 5            | 1.99 % (1.78 % - 2.21 %) | 1.73 % (1.60 % - 1.87 %) | 1.70 % (1.60 % - 1.80 %) | 1.66 % (1.56 % - 1.76 %) |
| 6            | 2.40 % (2.16 % - 2.66 %) | 1.98 % (1.83 % - 2.14 %) | 1.86 % (1.76 % - 1.97 %) | 1.83 % (1.72 % - 1.94 %) |
| 7            | 2.79 % (2.51 % - 3.09 %) | 2.30 % (2.13 % - 2.48 %) | 2.09 % (1.97 % - 2.21 %) | 1.97 % (1.85 % - 2.10 %) |
| 8            | 3.12 % (2.80 % - 3.45 %) | 2.63 % (2.43 % - 2.83 %) | 2.37 % (2.23 % - 2.51 %) | 2.17 % (2.03 % - 2.31 %) |
| 9            | 3.59 % (3.22 % - 3.97 %) | 2.98 % (2.76 % - 3.20 %) | 2.63 % (2.47 % - 2.78 %) | 2.40 % (2.24 % - 2.58 %) |
| 10           | 3.87 % (3.47 % - 4.30 %) | 3.29 % (3.05 % - 3.55 %) | 3.02 % (2.84 % - 3.21 %) | 2.60 % (2.41 % - 2.81 %) |
| 11           | 4.23 % (3.78 % - 4.71 %) | 3.63 % (3.36 % - 3.92 %) | 3.46 % (3.24 % - 3.68 %) | 2.90 % (2.66 % - 3.15 %) |
| 12           | 4.71 % (4.18 % - 5.27 %) | 4.13 % (3.80 % - 4.47 %) | 3.85 % (3.60 % - 4.12 %) | 3.27 % (2.95 % - 3.60 %) |
| 13           | 5.44 % (4.78 % - 6.16 %) | 4.48 % (4.11 % - 4.87 %) | 4.03 % (3.75 % - 4.33 %) | 3.33 % (2.99 % - 3.73 %) |
| 14           | 6.03 % (5.24 % - 7.00 %) | 4.93 % (4.48 % - 5.40 %) | 4.41 % (4.06 % - 4.79 %) | 3.45 % (3.05 % - 4.00 %) |

## Group 6: All cemented hips

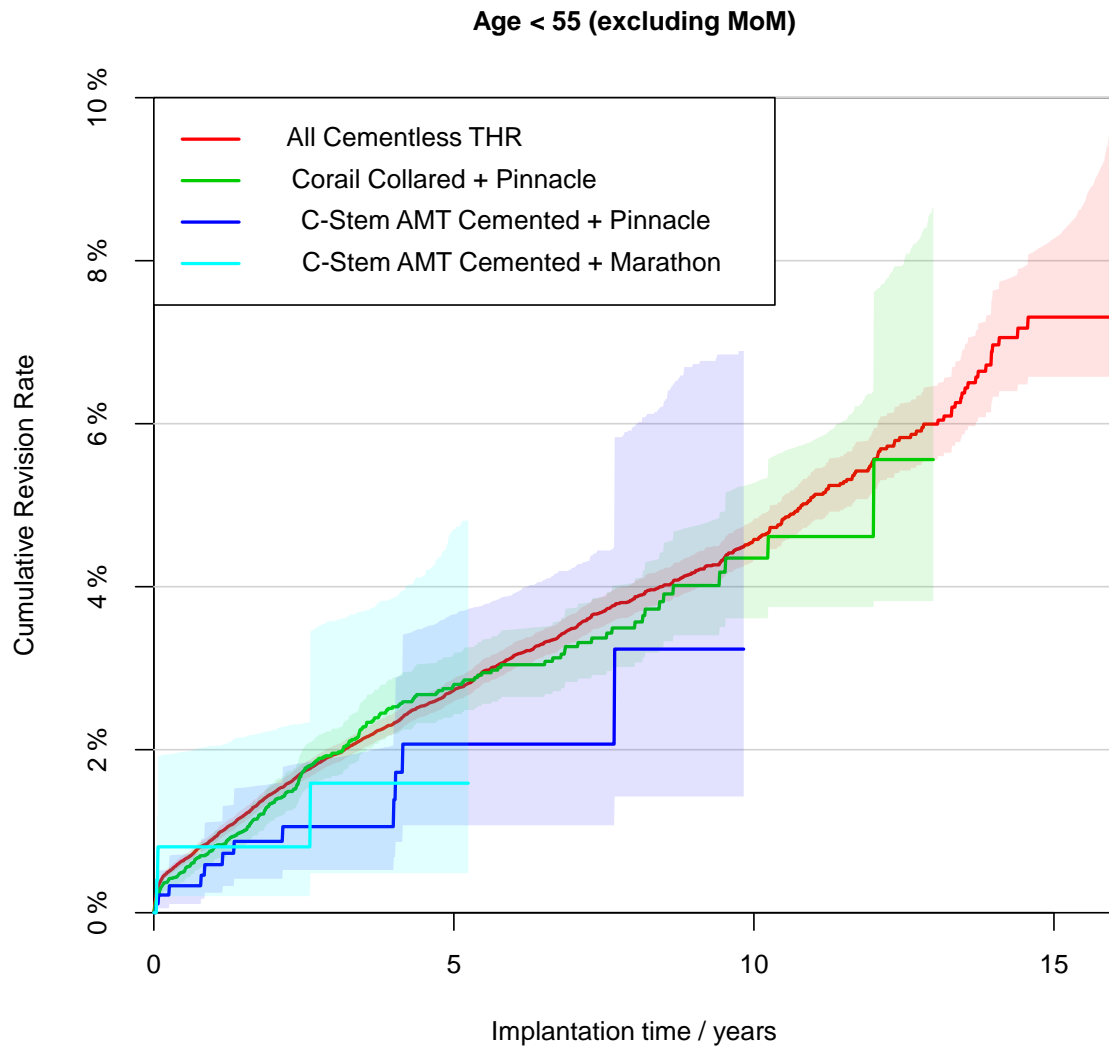
| Time / years | Age < 55                 | Age 55-64                | Age 65 - 74              | Age > 75                 |
|--------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1            | 0.67 % (0.53 % - 0.83 %) | 0.54 % (0.47 % - 0.61 %) | 0.52 % (0.48 % - 0.56 %) | 0.58 % (0.54 % - 0.61 %) |
| 2            | 1.18 % (0.99 % - 1.39 %) | 0.91 % (0.81 % - 1.00 %) | 0.79 % (0.74 % - 0.84 %) | 0.82 % (0.77 % - 0.86 %) |
| 3            | 1.61 % (1.38 % - 1.86 %) | 1.22 % (1.11 % - 1.34 %) | 1.09 % (1.03 % - 1.15 %) | 1.01 % (0.96 % - 1.06 %) |
| 4            | 1.98 % (1.71 % - 2.26 %) | 1.45 % (1.33 % - 1.58 %) | 1.32 % (1.25 % - 1.38 %) | 1.20 % (1.14 % - 1.25 %) |
| 5            | 2.31 % (2.01 % - 2.63 %) | 1.77 % (1.63 % - 1.91 %) | 1.55 % (1.48 % - 1.63 %) | 1.36 % (1.30 % - 1.43 %) |
| 6            | 2.90 % (2.54 % - 3.28 %) | 2.04 % (1.88 % - 2.20 %) | 1.80 % (1.72 % - 1.89 %) | 1.55 % (1.48 % - 1.62 %) |
| 7            | 3.29 % (2.89 % - 3.71 %) | 2.35 % (2.17 % - 2.53 %) | 2.07 % (1.97 % - 2.16 %) | 1.76 % (1.69 % - 1.84 %) |
| 8            | 3.77 % (3.32 % - 4.26 %) | 2.67 % (2.48 % - 2.88 %) | 2.38 % (2.27 % - 2.49 %) | 1.95 % (1.86 % - 2.03 %) |
| 9            | 4.28 % (3.76 % - 4.83 %) | 3.12 % (2.89 % - 3.35 %) | 2.75 % (2.63 % - 2.87 %) | 2.15 % (2.05 % - 2.25 %) |
| 10           | 4.91 % (4.31 % - 5.54 %) | 3.67 % (3.41 % - 3.95 %) | 3.13 % (2.99 % - 3.27 %) | 2.40 % (2.29 % - 2.52 %) |
| 11           | 5.64 % (4.94 % - 6.39 %) | 4.23 % (3.93 % - 4.55 %) | 3.72 % (3.55 % - 3.88 %) | 2.69 % (2.55 % - 2.83 %) |
| 12           | 6.52 % (5.69 % - 7.42 %) | 4.94 % (4.58 % - 5.31 %) | 4.20 % (4.01 % - 4.39 %) | 2.91 % (2.75 % - 3.07 %) |
| 13           | 7.42 % (6.43 % - 8.48 %) | 5.84 % (5.40 % - 6.30 %) | 4.73 % (4.50 % - 4.96 %) | 3.14 % (2.95 % - 3.34 %) |
| 14           | 8.46 % (7.28 % - 9.80 %) | 6.44 % (5.93 % - 6.98 %) | 5.19 % (4.92 % - 5.46 %) | 3.35 % (3.12 % - 3.62 %) |

Cumulative revision rate with 95% confidence intervals

Rate is only reported for times where more than 40 remain at risk

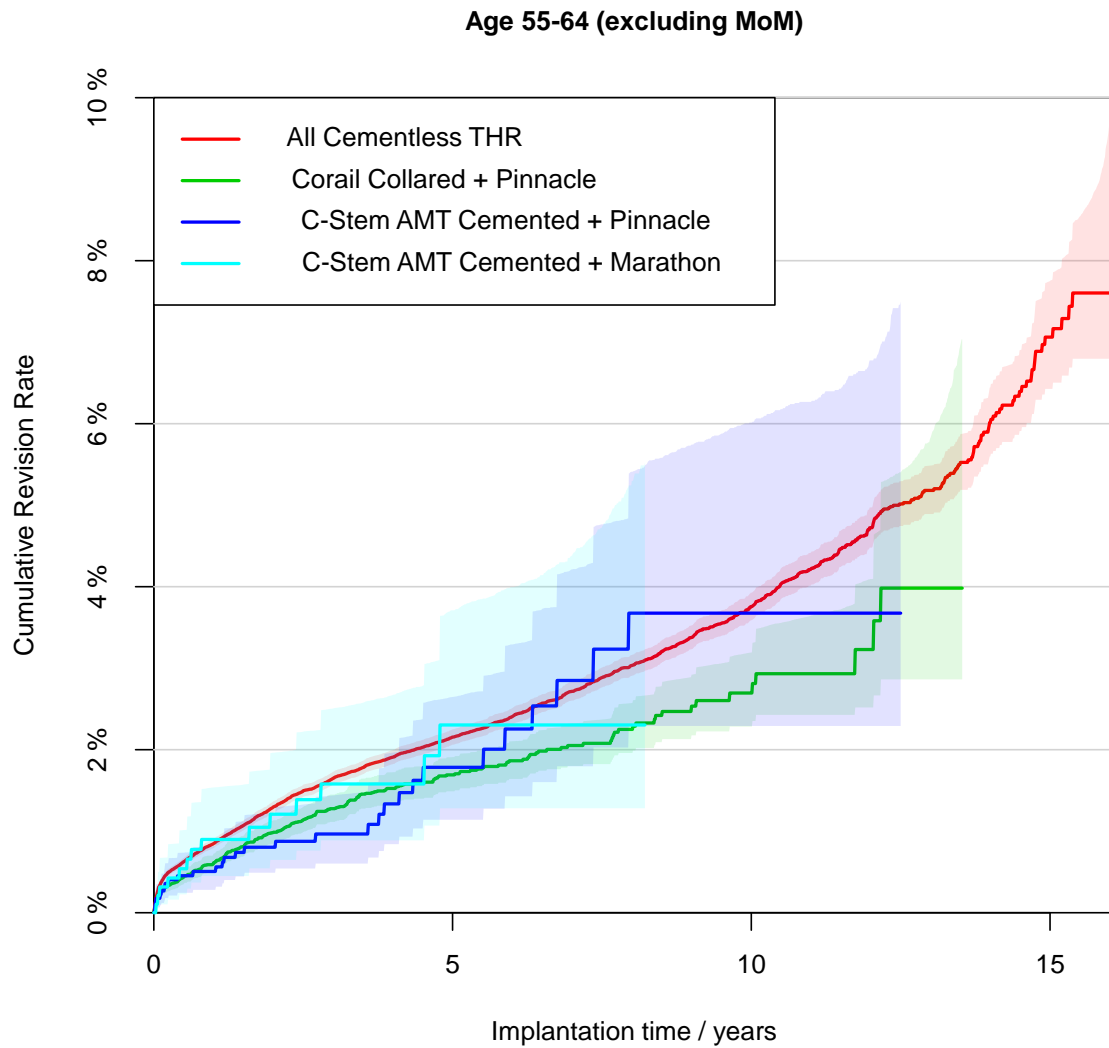
Endpoint: Revision for any reason

Cumulative Revision Rate



Cumulative revision rate with 95% confidence intervals  
 Rate is only reported for times where more than 40 remain at risk  
 Endpoint: Revision for any reason

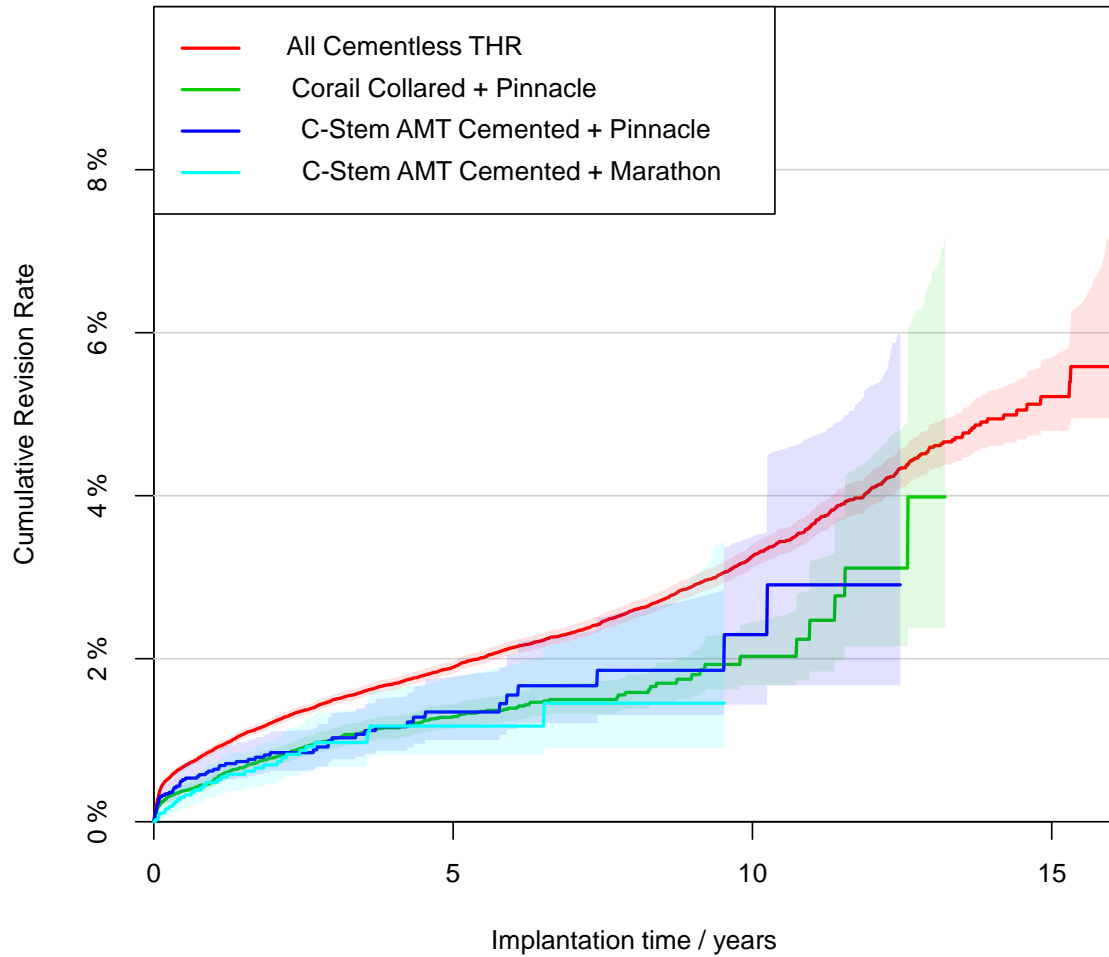
Cumulative Revision Rate



Cumulative revision rate with 95% confidence intervals  
 Rate is only reported for times where more than 40 remain at risk  
 Endpoint: Revision for any reason

# Cumulative Revision Rate

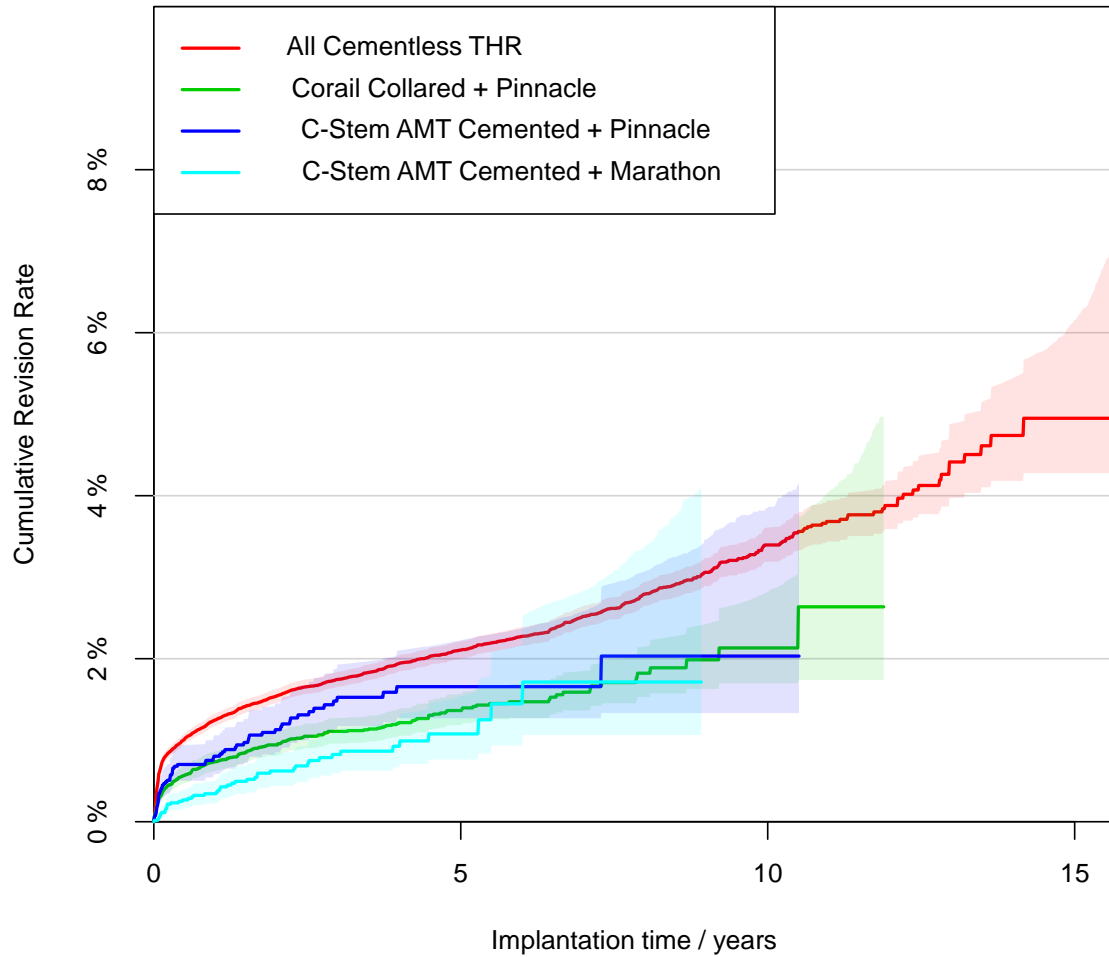
Age 65 - 74 (excluding MoM)



Cumulative revision rate with 95% confidence intervals  
Rate is only reported for times where more than 40 remain at risk  
Endpoint: Revision for any reason

# Cumulative Revision Rate

Age > 75 (excluding MoM)



Cumulative revision rate with 95% confidence intervals  
Rate is only reported for times where more than 40 remain at risk  
Endpoint: Revision for any reason



## Disclaimer

### Disclaimer

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