

Figs. E-1A and E-1B Case 6. A retrieved Crossfire acetabular cup with delamination of severity 1 (barely observable changes) after 2.0 years in vivo. Fig. E-1A Overview.

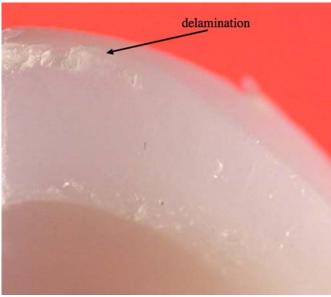
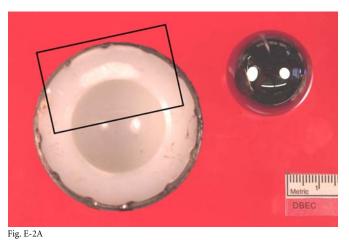


Fig. E-1B
Close-up view of the delamination.



Figs. E-2A and E-2B Case 12. A retrieved Crossfire acetabular cup with delamination of severity 2 (easily detected levels of change) after 3.3

years in vivo. Fig. E-2A Overview.

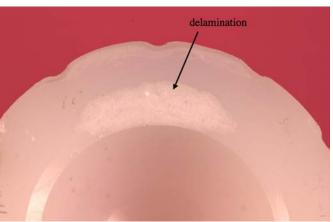


Fig. E-2B Close-up view of the delamination.



Figs. E-3A and E-3B Case 8. A retrieved Crossfire acetabular cup with delamination of severity 3 (severe changes, potentially threatening the function of the implant) after 2.9 years in vivo. **Fig. E-3A** Overview.

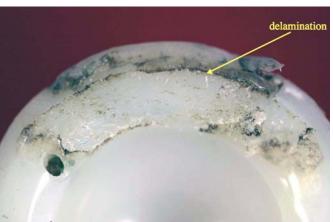
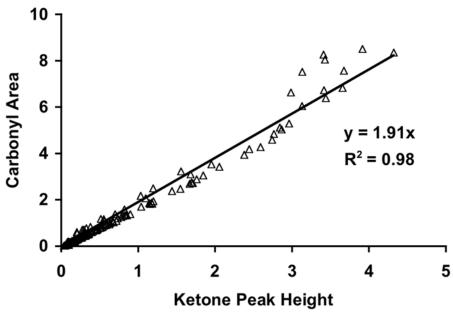


Fig. E-3B Close-up view of the delamination.



 $\label{eq:Fig.E-4} Fig.\,E-4 \\ Oxidation values calculated with use of the carbonyl area method and the peak height ratio \\ method show strong linear correlation (R^2=0.98).$