

<b>Case Number:</b>	CM15-0022870		
<b>Date Assigned:</b>	02/12/2015	<b>Date of Injury:</b>	12/05/2010
<b>Decision Date:</b>	04/13/2015	<b>UR Denial Date:</b>	01/15/2015
<b>Priority:</b>	Standard	<b>Application Received:</b>	02/06/2015

### HOW THE IMR FINAL DETERMINATION WAS MADE

MAXIMUS Federal Services sent the complete case file to an expert reviewer. He/she has no affiliation with the employer, employee, providers or the claims administrator. He/she has been in active clinical practice for more than five years and is currently working at least 24 hours a week in active practice. The expert reviewer was selected based on his/her clinical experience, education, background, and expertise in the same or similar specialties that evaluate and/or treat the medical condition and disputed items/Service. He/she is familiar with governing laws and regulations, including the strength of evidence hierarchy that applies to Independent Medical Review determinations.

The Expert Reviewer has the following credentials:  
 State(s) of Licensure: Illinois, California, Texas  
 Certification(s)/Specialty: Orthopedic Surgery

### CLINICAL CASE SUMMARY

The expert reviewer developed the following clinical case summary based on a review of the case file, including all medical records:

The injured worker is a 62-year-old male, who sustained an industrial injury on 12/5/10 relative to continuous standing and bending. The patient underwent anterior lumbar interbody fusion at L5/S1 on 5/23/14. The operative note dated 5/23/14, indicated that the left iliac vein had a small tear that required suturing on three occasions during the procedure for continued leakage. There was hemodynamic instability noted during the procedure, which was rapidly treated with crystalloid infusion and intermittent vasopressor medication. The Cell Saver was used with 1000 ml of blood lost, and 500 ml returned to the patient. There was no sustained hypotension noted and patency of the iliac vein was confirmed on completion of the surgery. The patient was admitted to ICU for overnight observation, and serial hematocrits were monitored. The posterior fusion was delayed for 3 days. The injured worker subsequently underwent posterior lumbar laminectomy pedicle screw fixation at L5/S1 on 5/26/14. The operative note on 5/26/14 did not indicate that Cell Saver was used. Under consideration is a request for Cell Saver rental on 5/23/14 for 3 hours. On 1/15/15 Utilization Review non-certified a request for a cell saver machine rental, based on an absence of clinical documentation relative to the amount of blood loss or the amount transfused. The utilization review physician cited the Journal of Neurosurgery 12/2011. On 2/2/15, the injured worker submitted an application for IMR for review of a cell saver machine rental.

### IMR ISSUES, DECISIONS AND RATIONALES

The Final Determination was based on decisions for the disputed items/services set forth below:

**Cell saver machine rental:** Overturned

**Claims Administrator guideline:** The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation Journal of Neurosurgery: Spine, December 2011, Volume 15, Number 6, pages 686 - 688.

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Elgafy H, Bransford RJ, McGuire RA, Dettori JR, Fischer D. Blood loss in major spine surgery: are there effective measures to decrease massive hemorrhage in major spine fusion surgery Spine (Phila Pa 1976). 2010 Apr 20; 35(9 Suppl):S47-56.

**Decision rationale:** The California MTUS and Official Disability Guidelines are silent regarding the use of cell saver. Current peer-reviewed literature states that the use of autologous cell saver transfusion did not reduce the requirement for intraoperative or postoperative allogeneic blood transfusion. The use of cell saver in instrumented lumbar fusion cases was not able to decrease the need for blood transfusion. Cell-saver use was associated with a significantly higher blood loss. On the basis of the current literature, there is little support for routine use of cell saver during elective spinal surgery. This patient was treated with Cell Saver intra-operatively following a tear to the iliac vein that required multiple repairs during the procedure for continued leakage. There was 1000 ml of estimated blood loss documented, with 500 ml transfused to the patient via Cell Saver. It does not appear from the records that use of the Cell Saver was prophylactic or routine based on the operative reports. The use of Cell Saver for this patient to promote stable hemodynamics is reasonable. Therefore, this request is medically necessary.