



PALACOS[®] pro ALL-IN-ONE FIXATION SYSTEM[™]

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Your single-SKU solution to going all-in for your staff, patients, and surgeons.

All-In on Safety. All-In on Efficacy. All-in on Ease of Use.

PALACOS[®] Pro

THE NEXT EVOLUTION IN CEMENT MIXING.

The most used bone cement in Australia¹ and the United Kingdom;² PALACOS[®] products have been used in over 30 million³ procedures over the past 60 years, and are known for their exceptional survivorship.⁴⁻⁶ PALACOS[®] cements are designed to be mixed within cartridge vacuum mixing systems for optimal cement strength and durability. In a direct comparison, hand mixing has been shown to reduce the cycles to failure for PALACOS[®] cement by up to 43%.⁷

25% lower risk of revision for THA

than other bone cements in the NJR when cemented with PALACOS® R+G^{*,6***}

>50% decrease in revision risk in THR when cemented with PALACOS® MV+G* vs. Simplex® P+T and Smartset® GHV.8

> 8% better risk-adjusted survivorship in TKA when cemented with PALACOS® R+G^{*} than all other bone cements in the NJR.⁹

3x fewer revisions for early aseptic loosening in TKA when cemented with PALACOS® R vs. Cobalt® HV and Simplex® HV.¹¹ 61% decrease in 1 year infection rates for TKA when cemented with PALACOS® R+G* vs. plain cements¹⁰

*PALACOS R+G and MV+G are indicated for use in the second stage of a two-stage revision for total joint arthroplasty after the initial infection has been cleared. **Other bone cements in the NIR include Simplex®, CMW®, and Refobacin®.

1. Table C9: 10 Most Used Cement Types for Tibial Prosthesis in Primary TKR. AOANIRR Supplementary Report on Cement in Hip & Knee Arthroplasty. 2020. p 9. 2. NIR 16th Annual Report, 2019.⁺ 3. Data on File. 4. Espehaug B, et al. The type of cement and failure of THR. JBJS (Br) 2002; 84: 832-8. 5. Malchau H, et al. Prognosis of THR. Update and Validation of Results from the SHAR 1979-1998. In: Scientific Exhibition presented at the 67th Annual AAOS Meeting, March 15-19, 2000, Orlando, USA. 6. NIR Data Supplier Feedback (summary reports); Cumulative revision rates at 14 years, all bearing types. Status August 2020.⁺ 7. Dunne NJ, et al. The relationship between porosity and fatigue characteristics. Biomaterials 2003; 24: 239-245.

MEET YOUR ANSWER TO "WHAT IF?"

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In 2018, the International Consensus Meeting on Musculoskeletal Infection agreed with overwhelming majority (97%) that there is a high risk of unsterilized particles contaminating the surgical field¹². The new PALACOS[®] pro All-In-One-Fixation-System[™] has been developed to give surgeons and staff peace of mind - with enhanced safety features, integrated education, and multiple sizes and viscosities for utmost flexibility. When combined with our innovative, single-use, pre-sterilized PALAGUN[®], PALACOS[®] pro offers the answer to every OR's "what if?"

INCREASED SIMPLICITY

- All accessories are included in a single stocking unit to simplify ordering and lower vendor costs.
- All-In-One mixing and application system reduces risk of back-table contamination and minimizes risk of human error during the mixing process.

ENHANCED SAFETY

- Sealed ampoules and an activated charcoal filter limit MMA fumes.
 - Double filtration system captures glass particles.
 - Closed system prevents bacteria or particulate contaminants from entering the cement during mixing.
 - Enclosed ampoules minimize glass cuts and glove punctures.

INTEGRATED EDUCATION

- Intuitive color-coding guides users throughout mixing.
- Pictogram operating instructions are printed on both the mixing device and Tyvek® packaging.
- Clear inspection window beneath the plunger provides easy monitoring of monomer transfer.

UTMOST FLEXIBILITY

- Available in four variants (R, R+G^{*}, MV, and MV+G^{*}), and two sizes (40 and 80) for utmost flexibility during surgery.
- Able to be mixed with or without vacuum.

8. Trela-Larsen L, et al. The association between cement type and the subsequent risk of revision surgery in primary THR. Acta Orthopaedica 2018; 89(1): 40-6. 9. NJR Data Supplier Feedback (summary reports); Cox Proportional Hazards model for revision, with endpoint at any revision. Status August, 2020.⁺ 10. Sanz-Ruiz P, et al. Is the Commercial ALBC Useful in Prophylaxis and Cost Saving After Knee and Hip Joint Arthroplasty? The Transatlantic Paradox, JOA (2016) V 32, I 4, Pp 1095-1099. 11. Buller LT, et al. Primary TKA Performed Using HV Cement is Associated with High Odds of Revision for Aseptic Loosening. JOA 2020; 35: 182-9. 12. Parvizi, et al. Proceedings of the ICM on PJI, 2018. JOA. 34(2)

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HOW DOES YOUR MIXING SYSTEM COMPARE?

	PALACOS® pro All-In-One Fixation System™	Stryker™ Revolution [®]	Smartmix™ CemVac® prefilled	DJO Surgical [®] Optivac [®]	Stryker™ ACM®	Open Bowl
Mixing with Vacuum	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Mixing without Vacuum	\checkmark	\checkmark		\checkmark		\checkmark
Double Filtration Prevents Glass Contamination	\sim					
Completely Closed System Minimizes MMA Fumes	\checkmark					
Color-Coded Steps Enable Easy Handling	\checkmark					
Prefilled Cement Liquid & Powder	~		\checkmark			
Multiple Viscosities & Sizes		\checkmark		\checkmark	\checkmark	\checkmark

THE NEXT EVOLUTION IN CEMENT MIXING.

All-In-One-Fixation-Systems [™]	Description		REF
PALACOS [®] R pro	High-viscosity bone cement in a self-contained mixing and delivery system for use with or without vacuum	1 x 40 1 x 80	5081286 5081287
PALACOS® R+G* pro	High-viscosity bone cement containing gentamicin in a self-contained mixing and delivery system for use with or without vacuum		5081288 5081289
PALACOS [®] MV pro	Medium-viscosity bone cement in a self-contained mixing and delivery system for use with or without vacuum	1 x 40 1 x 80	5150633 5150635
PALACOS [®] MV+G* pro	Medium-viscosity bone cement containing gentamicin in a self-contained mixing and delivery system for use with or without vacuum	1 x 40 1 x 80	5081290 5081291
PALACOS [®] pro medium nozzle	Single-use, flexible, conical nozzle	10 units	66054436

Delivery Systems	Description	Content	REF
PALAMIX [®] Cement Gun	Reusable cement application gun	1 unit	66036163
PALAGUN [®] Cement Gun	Sterile, single-use cement application gun	1 unit	5082371

For more information, visit www.heraeus-medical-usa.com or call 1.833.PALACOS.

*PALACOS® R+G and MV+G are indicated for use in the second stage of a two-stage revision for total joint arthroplasty after the initial infection has been cleared. We thank the patients and staff of all the hospitals in England, Wales, Northern Ireland and the Isle of Man who have contributed data to the National Joint Registry. We are grateful to the Healthcare Quality Improvement Partnership (HQIP), the NIR Steering Committee and staff at the NIR Centre for facilitating this work. The views expressed represent these of Heraeus Medical GmbH and do not necessarily reflect those of the NIR Steering Committee or the Health Quality Improvement Partnership (HQIP) who do not vouch for how the information is presented.