USE LESS & GET MORE OUT OF YOUR BIOREACTOR

RoosterReplenish™-MSC-XF
An Innovative, First-in-Class MSC-Specific Bioreactor Feed. Now Xeno-Free.

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RoosterBio™

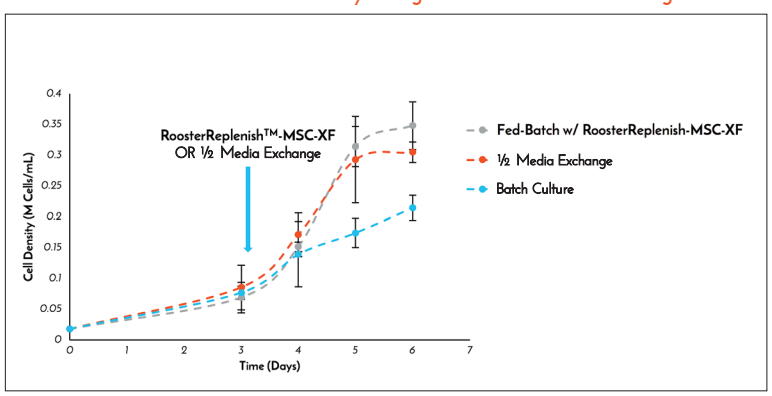
RoosterReplenish™-MSC-XF is the newest media booster (concentrated feed) from RoosterBio, offering an integrated approach to the complex challenges of hMSC culture scale-up.

PERFORMANCE

Optimize your productivity. Optimizing efficient MSC bioreactor culture is central to maximizing yields, minimizing time and cost, and recovering viable, functional cells at harvest. RoosterReplenish™-MSC-XF bioreactor feed is designed to achieve high cell growth in microcarrier-based suspension cultures when paired with our Xeno-free (XF) hMSCs and complementary engineered bioprocess media systems.

ROOSTERREPLENISH™-MSC-XF IS UNIQUELY ENGINEERED TO SIMPLIFY AND STREAMLINE hMSC EXPANSION – ***BOOSTING YOUR MEDIA PRODUCTIVITY BY MORE THAN 70%.***

XF hMSC Bioreactor Cell Density Using Various Culture Feed Regimens



Enhanced Media Productivity in Bioreactors Using a Fed-Batch System with RoosterReplenish™-MSC-XF

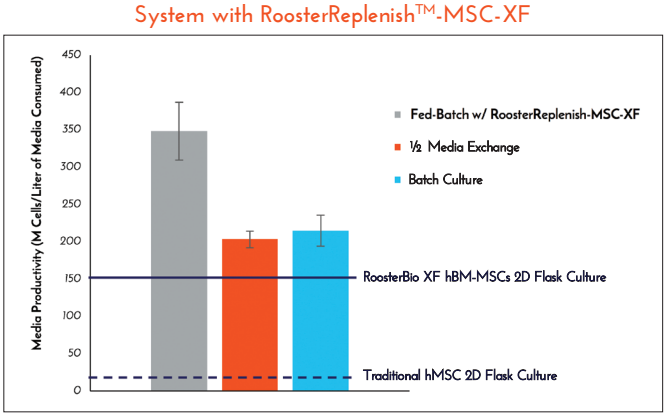


Fig 1(a): A comparison of XF hMSC bioreactor cell densities using various culture feed regimens. RoosterVial™-hBM-XF (Xeno-free human bone marrow-derived mesenchymal stem cells - (MSC-031)) were cultured in suspension in RoosterNourish™-MSC-XF (KT-016) and compared to batch culture and a half media exchange.
Fig 1(b): Fed-batch culture using RoosterReplenish-MSC-XF is the most efficient and productive culture feeding regimen, outperforming either 1/2 media exchange or batch culture by over 70%, and achieving up to 350 million (M) cells/L in media productivity. This productivity is >17 times the media productivity of traditional hMSC flask-based cultures of ~20M cells/L, and is the central driving force for cost reduction in bioreactor-based manufacturing. ***Note: Total cell yield is donor-dependent.*

BOOST YOUR MEDIA PRODUCTIVITY BY MORE THAN 70%.

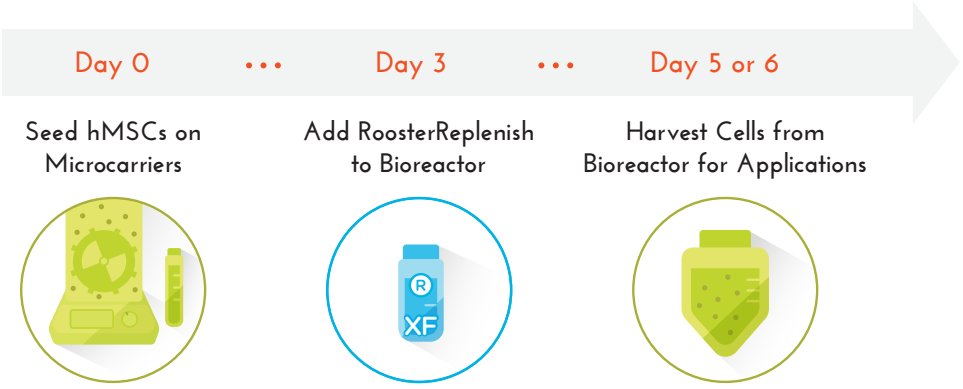
Whether you need 10 million or 10 billion hMSCs, we get you there rapidly, economically, and reproducibly.

INDUSTRIAL APPLICATIONS

- Enables a fed-batch suspension hMSC culture process.
- Enables media efficiency as a small- and large-scale stem cell bioreactor process optimization step for commercial-scale hMSC biomanufacturing.
- Significantly shortens development timelines for hMSC-based processes and products.

PRODUCT BENEFITS

- Incorporates translation-friendly processes and components into your workflow.
- Eliminates the need for partial or full media exchanges in bioreactor cultures – simply add the concentrated feed to cultures on day 3 or 4.



- Streamlines culture processes & reduces processing time and labor.
- Maintains stable nutrient and waste bioprofiles through 7 days of culture, comparable to batch culture or media exchange.
- Mitigates risk of contamination & minimizes in-process culture manipulation.
- Boosts Media Productivity*
  (millions of cells produced per Liter of media consumed)
  - Significantly minimizes media usage & reduces costs associated with hMSC culture scale-up
  - Savings scale with your process

*A half-media exchange *decreases media productivity by 50%.*

STOP ADDING PROCESS STEPS TO YOUR BIOREACTOR CULTURE. INSTEAD, ADD ENGINEERED SOLUTIONS TO SIMPLIFY YOUR MSC SCALE-UP AND ACCELERATE YOUR PATH TO THE CLINIC.

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