

APPENDIX 4C QUARTERLY ACTIVITY REPORT

Mesoblast Operational and Financial Highlights for Quarter Ended June 30, 2022

Melbourne, Australia; July 29 and New York, USA; July 29, 2022: Mesoblast Limited (ASX:MSB; Nasdaq:MESO), global leader in allogeneic cellular medicines for inflammatory diseases, today provided an activity report for the fourth quarter ended June 30, 2022.

Financial highlights

- Net cash usage for operating activities in the quarter was reduced by 33%, or US\$6.8 million, to US\$13.9 million compared with US\$20.7 million in the comparative quarter last year.¹
- Net cash usage for operating activities for the 12 months ended June 2022 were reduced by 38%, or US\$40.9 million, to US\$68.7 million compared with US\$106.7 million in the comparative 12 months.¹
- Cash on hand at the end of the quarter was US\$60.4 million, with up to an additional US\$40 million available to be drawn down from existing financing facilities subject to certain milestones.
- Revenues² in the quarter were US\$2.2 million, including US\$2.1 million from TEMCELL® HS Inj.³ royalties on sales for SR-aGvHD in Japan, an increase of 12% on the comparative quarter last year.
- Revenues² for the 12 months ended June 2022 increased 37%, compared with the comparative 12-month period, to US\$10.2 million primarily due to increased royalties on sales of TEMCELL® HS Inj. royalties on sales for SR-aGvHD in Japan and other milestone revenue.

Key updates on remestemcel-L

Biologics License Application (BLA) resubmission to the US Food and Drug Administration (FDA) for the treatment of children with steroid-refractory graft versus host disease (SR-aGVHD)

- In response to FDA guidance, Mesoblast has optimized a potency assay that was in place at the time of the 54-patient Phase 3 trial in children with SR-aGVHD.
- Mesoblast believes that the proposed potency assay measuring remestemcel-L's *in vitro* anti-inflammatory and immunomodulatory activity helps establish a clear understanding of remestemcel-L's mechanism of action in SR-aGVHD.
- The potency assay from the Phase 3 trial demonstrates a relationship between the product's activity *in vitro* and its effects on survival in the Phase 3 trial, with the strongest correlation to survival in those patients at highest mortality risk as measured by clinical severity or high biomarker levels of inflammation.
- Additionally, Mesoblast has now generated data from the expanded access program (EAP 275) of 241 children which confirm the ability of the *in-vitro* potency assay to measure product activity relevant to survival outcomes.
- In preparation for the expected FDA review, during the period Mesoblast completed a successful mock pre-approval inspection of its GMP manufacturing facility and process comprising both on-site and virtual inspections by external auditors.
- Mesoblast will provide these new data to FDA and address all chemistry, manufacturing and controls (CMC) outstanding items as required for the planned BLA resubmission in the current quarter. If the resubmission is accepted, CBER will consider the adequacy of the clinical data in the context of the related CMC issues.

COVID-19 acute respiratory distress syndrome (ARDS)

- Mesoblast provided a 12-month update on survival outcomes from the randomized controlled trial of remestemcel-L in ventilator-dependent COVID-19 patients with moderate/severe acute ARDS. Through the initial 90 days, remestemcel-L reduced mortality by 48% compared to controls in a pre-specified analysis of 123 patients below age 65 (26% vs 44%, $p=0.038$),^{4,5} but not in 97 patients over age 65, as previously reported. In an exploratory analysis in patients under age 65 who also received dexamethasone as part of their standard of care, remestemcel-L reduced 90-day mortality by 77% compared to controls (14% vs 48%, $p=0.0037$).^{4,5} These early survival outcomes in the remestemcel-L group relative to controls were maintained at later timepoints in those under age 65, with a 42% reduction in mortality through 12 months and with continued observed synergy with dexamethasone ($p<0.05$).^{4,5}
- Mesoblast has entered into a non-binding Memorandum of Understanding (MOU) with Vanderbilt University Medical Center, which coordinates and works closely with clinical investigators at over 40 sites across the United States focused on studying ARDS and other critical illnesses. The MOU proposes a collaboration toward the design and execution of a second COVID-19 trial for remestemcel-L; to jointly develop a trial protocol and seek FDA approval for the trial, the results from which Mesoblast may use to support regulatory filings (such as seeking Emergency Use Authorization from FDA); and to negotiate a written, cooperative agreement and proceeding with the trial upon receipt of FDA approval.

Inflammatory Bowel Disease (IBD) – ulcerative colitis (UC) and Crohn’s colitis

- Results from the first patient cohort in the randomized, controlled study of remestemcel-L by direct endoscopic delivery to areas of inflammation in patients with medically refractory Crohn’s colitis were published in the peer-reviewed journal *British Journal of Surgery*.⁶
- Strategically, Mesoblast views UC and Crohn’s colitis as a potentially important label extension for remestemcel-L given the gastrointestinal involvement common to acute graft versus host disease and inflammatory bowel disease. Gastrointestinal damage is the major driver of aGVHD mortality and is linked to systemic inflammation in aGVHD. Biomarkers that predict high mortality in aGVHD, such as blood levels of soluble suppression of tumorigenicity 2 (ST2),^{7,8} have shown to be significantly reduced in patients treated with remestemcel-L.⁹ ST2 has also been shown to be associated with active IBD (UC & Crohn’s).

Key updates on rexlemestrocel-L:

Chronic Heart Failure

- Results from the DREAM-HF Phase 3 trial of rexlemestrocel-L in patients with chronic heart failure and reduced ejection fraction (HFrEF) were highlighted at a heart failure panel discussion titled “Late-Stage Advancements in Heart Failure Therapeutics and Management.”
- Treatment with rexlemestrocel-L resulted in greater improvement in the pre-specified analysis of left ventricular ejection fraction (LVEF) at 12 months relative to controls, after a single intervention in the 565-patient randomized controlled trial in New York Heart Association (NYHA) class II/III chronic heart failure. Improvement in LVEF was most pronounced in the setting of inflammation and preceded long-term reduction in the 3-point MACE of cardiovascular death, non-fatal heart attack or stroke. Effects on LVEF and MACE outcomes were even more pronounced in 301 HFrEF patients with high baseline levels of inflammation as measured by hsCRP. LVEF improvement at 12 months may be an appropriate early surrogate endpoint for long-term reduction in MACE.
- Results from three randomized controlled trials in class II/III HFrEF and in end-stage HFrEF with left ventricular assist devices (LVADs) support the idea of a common mechanism of action (MOA) by which rexlemestrocel-L reverses inflammation-related endothelial dysfunction and reduces adverse clinical outcomes across the spectrum of HFrEF patients.
- Rexlemestrocel-L has regenerative medicine advanced therapy (RMAT) designation from the FDA for treatment of chronic heart failure with left ventricular systolic dysfunction in patients with an LVAD. Mesoblast now intends to meet with FDA under the RMAT framework to discuss

the totality of the data and the evidence of a common rexlemestrocel-L MOA across the broader HFrEF spectrum.

Chronic Low Back Pain

- Mesoblast hosted a webinar for analysts and investors focused on the current treatment landscape and unmet medical need for patients with chronic low back pain (CLBP) due to degenerative disc disease (DDD), a condition associated with local inflammation in the disc. The webinar featured presentations from Key Opinion Leaders (KOLs) Douglas P. Beall, MD, FIPP, FSIR, DAAPM (Clinical Radiology Oklahoma) and Hyun W. Bae, MD (Spine-Center at Cedars-Sinai Medical Center). The KOLs focused on Mesoblast's Phase 3 program for rexlemestrocel-L and where it may fit in the paradigm of the patient journey.
- Mesoblast received feedback in December 2021 from FDA on the Phase 3 program for CLBP and plans to conduct an additional US Phase 3 trial which may support submissions for potential approval in both the US and EU. Following review of the completed Phase 3 trial data, FDA agreed with Mesoblast's proposal for pain reduction at 12 months as the primary endpoint of the next trial, with functional improvement and reduction in opioid use as secondary endpoints.

Other:

Salary payments to full-time Executive Directors were US\$337,605 and fees to Non-Executive Directors were US\$192,798, detailed in Item 6 of the Appendix 4C cash flow report for the quarter.¹⁰

A copy of the Appendix 4C – Quarterly Cash Flow Report for the fourth quarter FY2022 is attached.

About Mesoblast

Mesoblast is a world leader in developing allogeneic (off-the-shelf) cellular medicines for the treatment of severe and life-threatening inflammatory conditions. The Company has leveraged its proprietary mesenchymal lineage cell therapy technology platform to establish a broad portfolio of late-stage product candidates which respond to severe inflammation by releasing anti-inflammatory factors that counter and modulate multiple effector arms of the immune system, resulting in significant reduction of the damaging inflammatory process.

Mesoblast has a strong and extensive global intellectual property portfolio with protection extending through to at least 2041 in all major markets. The Company's proprietary manufacturing processes yield industrial-scale, cryopreserved, off-the-shelf, cellular medicines. These cell therapies, with defined pharmaceutical release criteria, are planned to be readily available to patients worldwide.

Mesoblast is developing product candidates for distinct indications based on its remestemcel-L and rexlemestrocel-L allogeneic stromal cell technology platforms. Remestemcel-L is being developed for inflammatory diseases in children and adults including steroid refractory acute graft versus host disease, biologic-resistant inflammatory bowel disease, and acute respiratory distress syndrome. Rexlemestrocel-L is in development for advanced chronic heart failure and chronic low back pain. Two products have been commercialized in Japan and Europe by Mesoblast's licensees, and the Company has established commercial partnerships in Europe and China for certain Phase 3 assets

Mesoblast has locations in Australia, the United States and Singapore and is listed on the Australian Securities Exchange (MSB) and on the Nasdaq (MESO). For more information, please see www.mesoblast.com, LinkedIn: Mesoblast Limited and Twitter: @Mesoblast

References / Footnotes

1. Accounting policy change resulted in a US\$1.8 million benefit in the June 2022 quarter and a US\$6.1m benefit for the 12 months ended 30 June 2022
2. Unaudited
3. TEMCELL® HS Inj. is a registered trademark of JCR Pharmaceuticals Co. Ltd.
4. All p-values are descriptive and not adjusted for multiplicity
5. Hazard Ratios calculated using Cox regression proportional hazards model without adjustment; p-value from log rank test
6. Lightner AL., et al. Remestemcel-L allogeneic bone marrow-derived mesenchymal stem cell product to treat medically refractory Crohn's colitis: preliminary phase IB/IIA study. *British J Surgery* 2022; 1-3. <https://doi.org/10.1093/bjs/znac078>
7. Reichenbach DK et al. *Blood*. 2015 May 14;125(20):3183-92.
8. Vander Lugt MT et al. *New Engl J Med*. 2013 Aug 8 369:529-39.
9. Kurtzberg J., 62nd annual meeting of the American Society of Hematology (ASH) on December 6, 2020
10. As required by ASX listing rule 4.7 and reported in Item 6 of the Appendix 4C, reported are the aggregated total payments to related parties being Executive Directors and Non-Executive Directors

Forward-Looking Statements

This press release includes forward-looking statements that relate to future events or our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to differ materially from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. We make such forward-looking statements pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 and other federal securities laws. Forward-looking statements should not be read as a guarantee of future performance or results, and actual results may differ from the results anticipated in these forward-looking statements, and the differences may be material and adverse. Forward-looking statements include, but are not limited to, statements about: the initiation, timing, progress and results of Mesoblast's preclinical and clinical studies, and Mesoblast's research and development programs; Mesoblast's ability to advance product candidates into, enroll and successfully complete, clinical studies, including multi-national clinical trials; Mesoblast's ability to advance its manufacturing capabilities; the timing or likelihood of regulatory filings and approvals (including BLA resubmission), manufacturing activities and product marketing activities, if any; the commercialization of Mesoblast's product candidates, if approved; regulatory or public perceptions and market acceptance surrounding the use of stem-cell based therapies; the potential for Mesoblast's product candidates, if any are approved, to be withdrawn from the market due to patient adverse events or deaths; the potential benefits of strategic collaboration agreements and Mesoblast's ability to enter into and maintain established strategic collaborations; Mesoblast's ability to establish and maintain intellectual property on its product candidates and Mesoblast's ability to successfully defend these in cases of alleged infringement; the scope of protection Mesoblast is able to establish and maintain for intellectual property rights covering its product candidates and technology; estimates of Mesoblast's expenses, future revenues, capital requirements and its needs for additional financing; Mesoblast's financial performance; developments relating to Mesoblast's competitors and industry; and the pricing and reimbursement of Mesoblast's product candidates, if approved. You should read this press release together with our risk factors, in our most recently filed reports with the SEC or on our website. Uncertainties and risks that may cause Mesoblast's actual results, performance or achievements to be materially different from those which may be expressed or implied by such statements, and accordingly, you should not place undue reliance on these forward-looking statements. We do not undertake any obligations to publicly update or revise any forward-looking statements, whether as a result of new information, future developments or otherwise.

Release authorized by the Chief Executive.

For more information, please contact:

Corporate Communications / Investors

Paul Hughes

T: +61 3 9639 6036

E: investors@mesoblast.com

Media

Sumit Media

Grant Titmus

T: +61 419 388 161

E: grant@sumitmedia.com.au

Rubenstein

Tali Mackay

E: tmackay@rubenstein.com

Appendix 4C

Quarterly cash flow report for entities subject to Listing Rule 4.7B

Name of entity

Mesoblast Limited

ABN

68 109 431 870

Quarter ended ("current quarter")

30 June 2022

Consolidated statement of cash flows	Current quarter \$US'000	Year to date (12 months) \$US'000
1. Cash flows from operating activities		
1.1 Receipts from customers	2,011	9,980
- royalty receipts		
1.2 Payments for		
(a) research and development	(4,673)	(24,240)
(b) manufacturing commercialization	(2,658)	(11,090)
(c) product manufacturing and operating costs	(2,248)	(13,480)
(d) advertising and marketing	(381)	(1,047)
(e) leased assets	—	—
(f) staff costs	(1,783)	(8,905)
(g) other expenses from ordinary activities	(3,530)	(14,203)
(h) other:		
- Intellectual property portfolio expenses	(641)	(2,804)
1.3 Dividends received (see note 3)	—	—
1.4 Interest received	2	7
1.5 Interest and other costs of finance paid	—	—
1.6 Income taxes paid	7	(24)
1.7 Government grants and tax incentives	—	24
1.8 Other (provide details if material)	—	—
1.9 Net cash from / (used in) operating activities	(13,894)	(65,782)

Consolidated statement of cash flows	Current quarter \$US'000	Year to date (12 months) \$US'000
2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
(i) entities	—	—
(j) businesses	—	—
(k) property, plant and equipment	(47)	(157)
(l) investments	—	—
(m) intellectual property	—	(75)
(n) other non-current assets	—	—
2.2 Proceeds from disposal of:		
(o) entities	—	—
(p) businesses	—	—
(q) property, plant and equipment	—	—
(r) investments	—	—
(s) intellectual property	—	—
(t) other non-current assets	—	—
2.3 Cash flows from loans to other entities	—	—
2.4 Dividends received (see note 3)	—	—
2.5 Other	—	—
2.6 Net cash from / (used in) investing activities	(47)	(232)

3. Cash flows from financing activities		
3.1 Proceeds from issues of equity securities (excluding convertible debt securities)	—	—
3.2 Proceeds from issue of convertible debt securities	—	—
3.3 Proceeds from exercise of options	—	209
3.4 Transaction costs related to issues of equity securities or convertible debt securities	(6)	(222)
3.5 Proceeds from borrowings	—	51,919
Proceeds from issue of warrants	—	8,081
3.6 Repayment of borrowings	—	(55,458)
3.7 Transaction costs related to loans and borrowings	(14)	(5,527)
Interest and other costs of finance paid	(1,767)	(6,084)

Consolidated statement of cash flows	Current quarter \$US'000	Year to date (12 months) \$US'000
3.8 Dividends paid	—	—
3.9 Other (payment of lease liability)	(429)	(2,788)
3.10 Net cash from / (used in) financing activities	(2,216)	(9,870)

Change in Accounting Policy

The Group routinely reviews the financial statements for opportunities to improve the quality of financial reporting. In November 2021, the Group refinanced its existing senior debt facility with a new US\$90.0 million five-year facility provided by funds managed by Oaktree Capital Management, L.P. (“Oaktree”) and as a result in the six months ended December 31, 2021, the Group received proceeds from borrowings and repaid the Hercules loan. In connection with the Group refinance, substantial balances related to payment of transaction costs from borrowings and charges on repayment of borrowings were recorded in the Statement of Cash Flows.

During the subsequent preparation of the Appendix 4D for the six month period ended December 31, 2021, management revised the accounting policy relating to the classification of the Interest and other costs of finance paid, previously classified within the operating activities of the Statement of Cash Flows. The Group has changed its accounting policy to classify cash flows from interest and other costs of finance paid as a financing activity because it improves the relevance of the cash flows paid from obtaining capital resources. This change in accounting policy also diminishes the mismatch in operating cash flows from the profit and loss and improves the reliability of the operating cash flow balance. This revised accounting policy has been retrospectively applied to this Appendix 4C to classify Interest and other costs of finance paid as a financing activity for the current quarter and year to date.

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of quarter (April 1, 2022)/beginning of year (July 1, 2021)	76,760	136,881
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(13,894)	(65,782)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(47)	(232)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(2,216)	(9,870)
4.5	Effect of movement in exchange rates on cash held	(156)	(550)
4.6	Cash and cash equivalents at end of period	60,447	60,447

5. Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$US'000	Previous quarter \$US'000
5.1 Bank balances	60,034	76,311
5.2 Call deposits	—	—
5.3 Bank overdrafts	—	—
5.4 Other (Term deposits)	413	449
5.5 Cash and cash equivalents at end of quarter (should equal item 4.6 above)	60,447	76,760

6. Payments to related parties of the entity and their associates	Current quarter \$US'000
6.1 Aggregate amount of payments to related parties and their associates included in item 1	530
6.2 Aggregate amount of payments to related parties and their associates included in item 2	—

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.

Payments for Non-executive Director fees and Executive Director's salary (for the current quarter) = US\$530,403

7.	Financing facilities <i>Note: the term "facility" includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.</i>	Total facility amount at quarter end \$US'000	Amount drawn at quarter end \$US'000
7.1	Loan facilities	130,000*	90,000*
7.2	Credit standby arrangements	—	—
7.3	Other (please specify)	—	—
7.4	Total financing facilities	130,000*	90,000*
7.5	Unused financing facilities available at quarter end		40,000*
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		
	<p><u>*Loan facility with Oaktree Capital Management, Inc.</u></p> <p>On November 19, 2021, Mesoblast refinanced its senior debt facility with a new US\$90.0 million secured five-year credit facility provided by funds managed by Oaktree Capital Management, L.P. ("Oaktree"). Mesoblast drew the first tranche of US\$60.0 million on closing, the remaining \$30.0 million is available prior to December 31, 2022, subject to certain milestones.</p> <p>The loan has an initial interest only period of three years, at a fixed rate of 9.75% per annum, after which time 40% of the principal is payable over two years and a final payment due no later than November 2026. Proceeds from the Oaktree facility have been used to discharge Mesoblast's obligations under the Hercules loan.</p> <p>The loan interest rate is fixed and as at June 30, 2022 the interest rate was 9.75%. In the current quarter, 8% interest was paid in cash, while 1.75% interest was not paid in cash, instead it was paid in kind (PIK) and accrued onto the loan balance outstanding.</p> <p><u>*Loan facility with NovaQuest Capital Management, L.L.C.</u></p> <p>On June 29, 2018, Mesoblast entered into a Loan and Security Agreement with NovaQuest Capital Management, L.L.C. ("NovaQuest") for a non-dilutive US\$40.0 million secured eight-year term loan. Mesoblast drew the first tranche of US\$30.0 million of the loan on closing. An additional US\$10.0 million from the loan will be drawn on marketing approval of RYONCIL by the United States Food and Drug Administration (FDA).</p> <p>Prior to maturity in July 2026, the loan is only repayable from net sales of RYONCIL in the treatment of pediatric patients who have failed to respond to steroid treatment for acute Graft versus Host Disease (aGvHD), in the United States and other geographies excluding Asia. Interest on the loan will accrue at a rate of 15% per annum with the interest only period lasting 4 years. Interest payments will be deferred until after the first commercial sale. The financing is subordinated to the senior creditor, Oaktree.</p>		

8. Estimated cash available for future operating activities	\$US'000
8.1 Net cash from / (used in) operating activities (item 1.9)	(13,894)
8.2 Cash and cash equivalents at quarter end (item 4.6)	60,447
8.3 Unused finance facilities available at quarter end (item 7.5)	40,000*
8.4 Total available funding (item 8.2 + item 8.3)	100,447
8.5 Estimated quarters of funding available (item 8.4 divided by item 8.1)	7.2
<i>Note: if the entity has reported positive net operating cash flows in item 1.9, answer item 8.5 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.5.</i>	
* Under the Oaktree senior debt facility \$30.0 million is available prior to December 31, 2022, subject to certain milestones. Under the NovaQuest loan facility, an additional US\$10.0 million from the loan will be drawn on marketing approval of RYONCIL by the United States Food and Drug Administration (FDA).	
8.6 If item 8.5 is less than 2 quarters, please provide answers to the following questions:	
8.6.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
Answer: Not applicable	
8.6.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?	
Answer: Not applicable	
8.6.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?	
Answer: Not applicable	
<i>Note: where item 8.5 is less than 2 quarters, all of questions 8.6.1, 8.6.2 and 8.6.3 above must be answered.</i>	

Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date:29 July 2022.....

Authorised by:Chief Executive.....
(Name of body or officer authorising release – see note 4)

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standard applies to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.