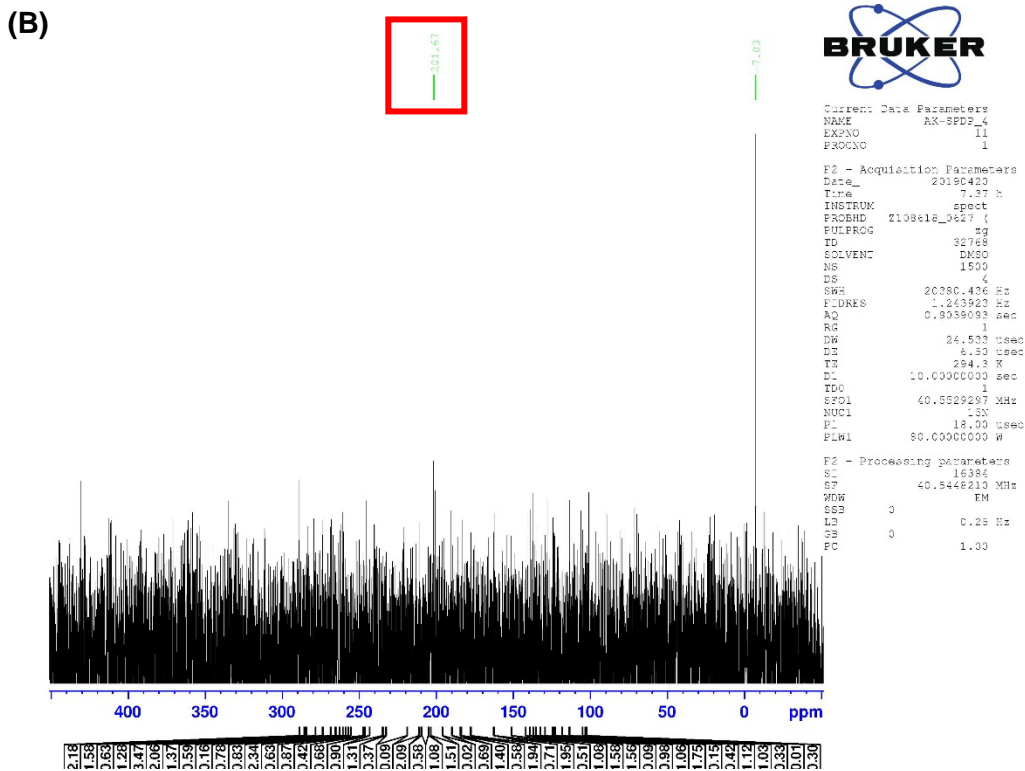
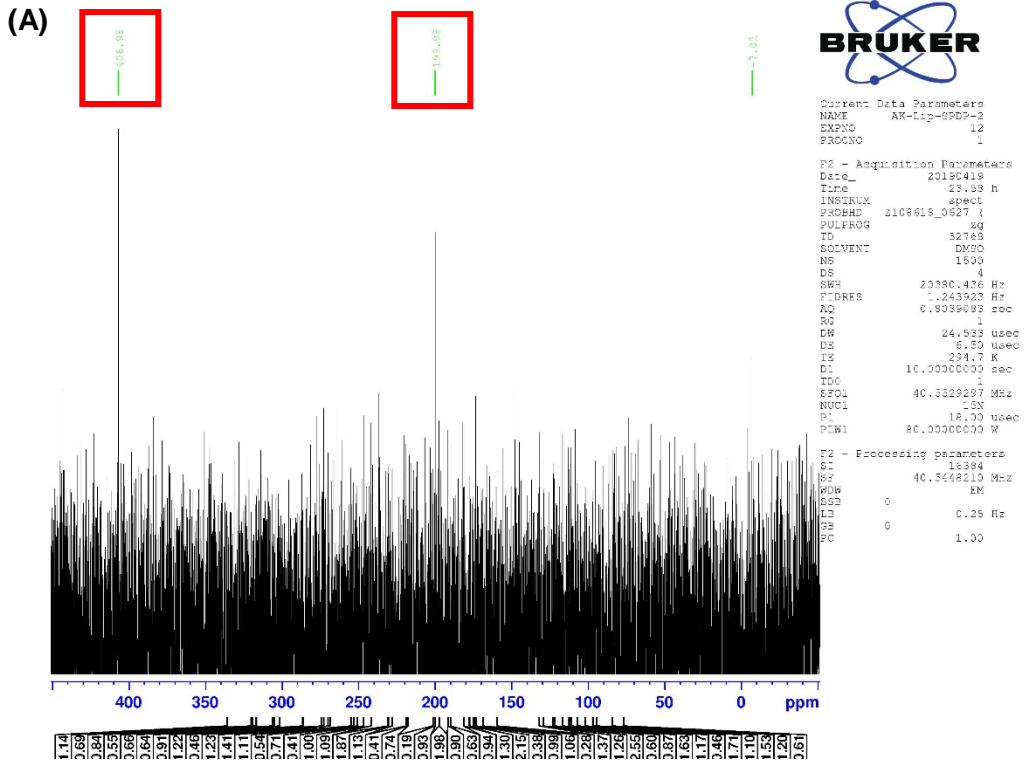


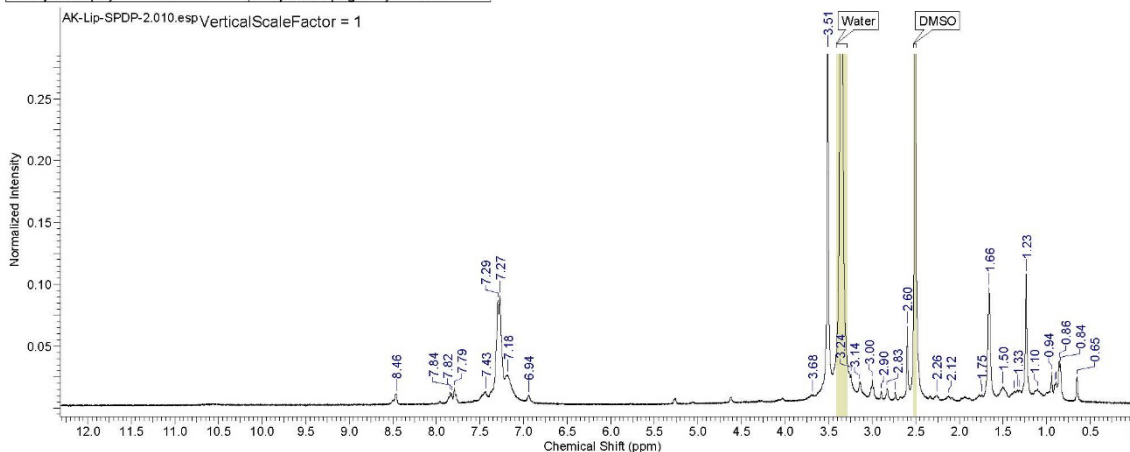
Supporting information



SI Figure 1. ^{15}N NMR spectra of (A) N-Succinimidyl 1,3-(2-pyridyldithio) propionate (SPDP) and (B) liposome-SPDP conjugate.

(A)

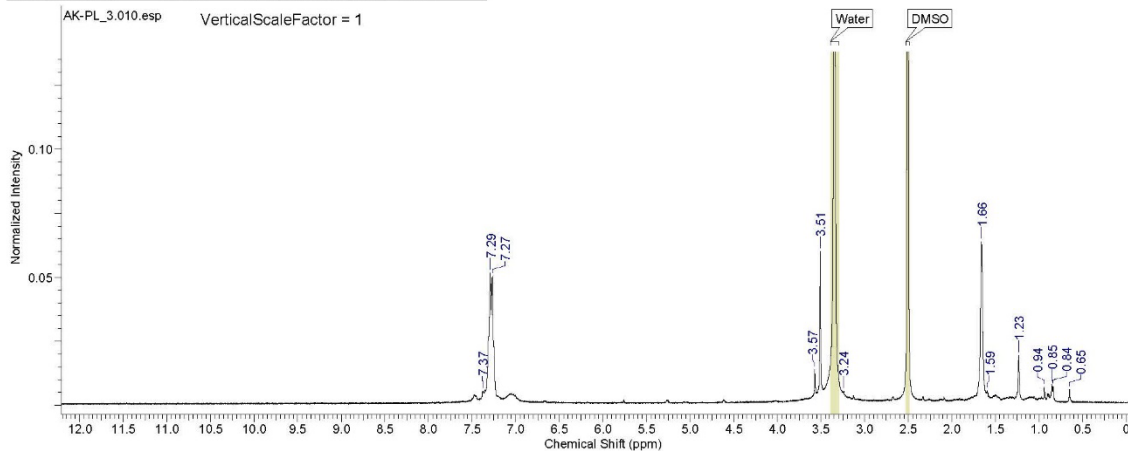
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Owner	nmsu	Points Count	32768	Pulse Sequence	zg30
SW(cyclical) (Hz)	8012.82	Solvent	DMSO-d6	Spectrum Offset (Hz)	2470.8027
Sweep Width (Hz)	8012.58	Temperature (degree C)	21.351	Receiver Gain	128.00
				Spectrum Type	STANDARD



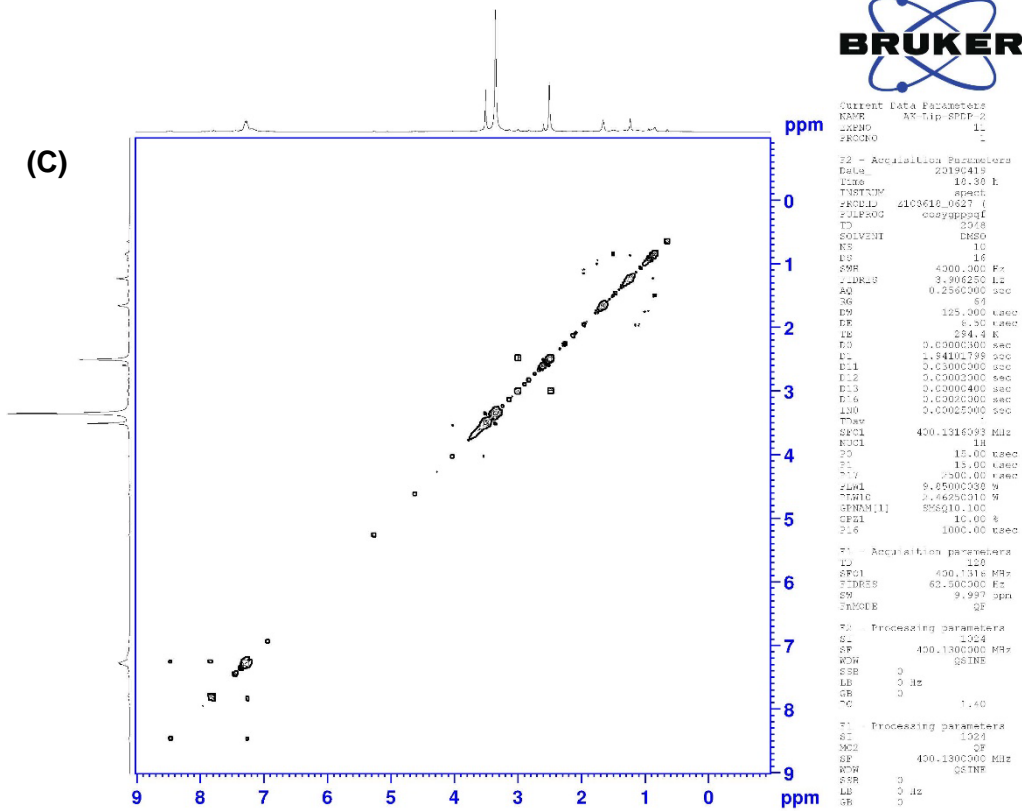
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2	[3.29 .. 3.41]	Water	1	mohammho	Mon 4/22/2019 8:04:15 PM		

(B)

Acquisition Time (sec)	4.0894	Date	20 Apr 2019 00:11:28	Date Stamp	20 Apr 2019 00:11:28
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Sweep Width (Hz)	8012.58	Temperature (degree C)	21.678	Receiver Gain	161.00
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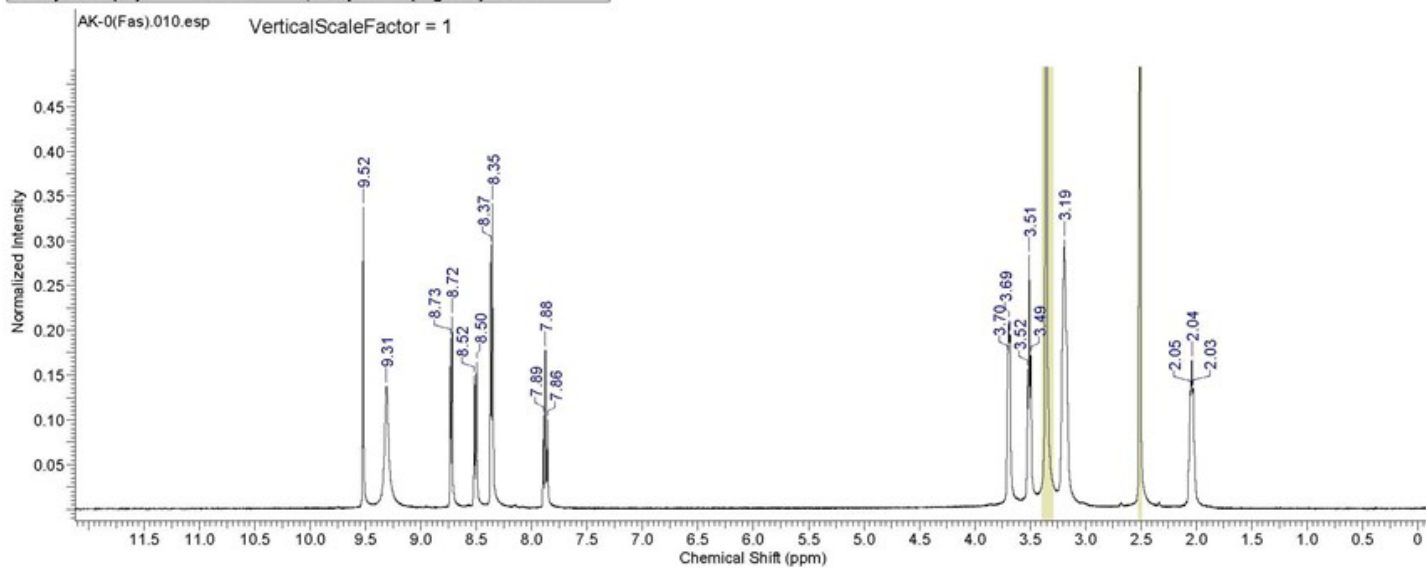
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2	[3.30 .. 3.39]	Water	1	mohammho	Mon 4/22/2019 8:07:39 PM		



SI Figure 2. ¹H NMR spectra of (A) liposome- N-Succinimidyl 1,3-(2-pyridyldithio) propionate (SPDP), (B) CAR-conjugated liposome, and (C) 2D-correlation spectroscopy (COSY) NMR of liposome-SPDP.

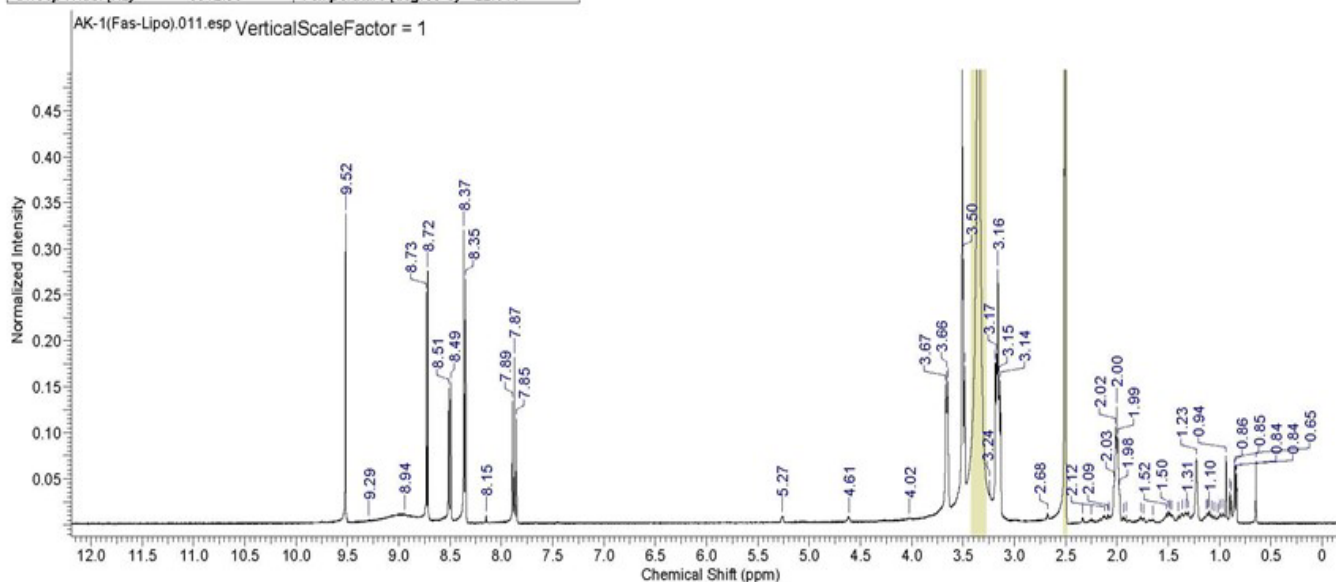
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SW(cyclical) (Hz)	8012.82	Solvent	DMSO-d6	Spectrum Offset (Hz)	2470.8027
Sweep Width (Hz)	8012.58	Temperature (degree C)	26.386	Receiver Gain	203.00
				Spectrum Type	STANDARD

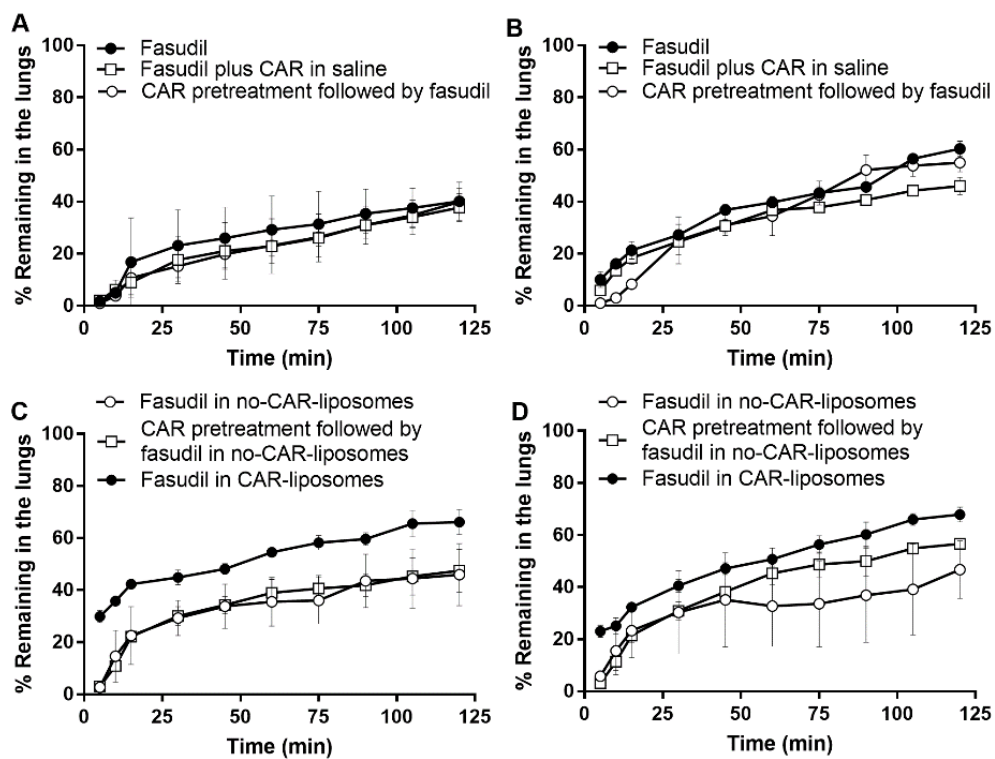


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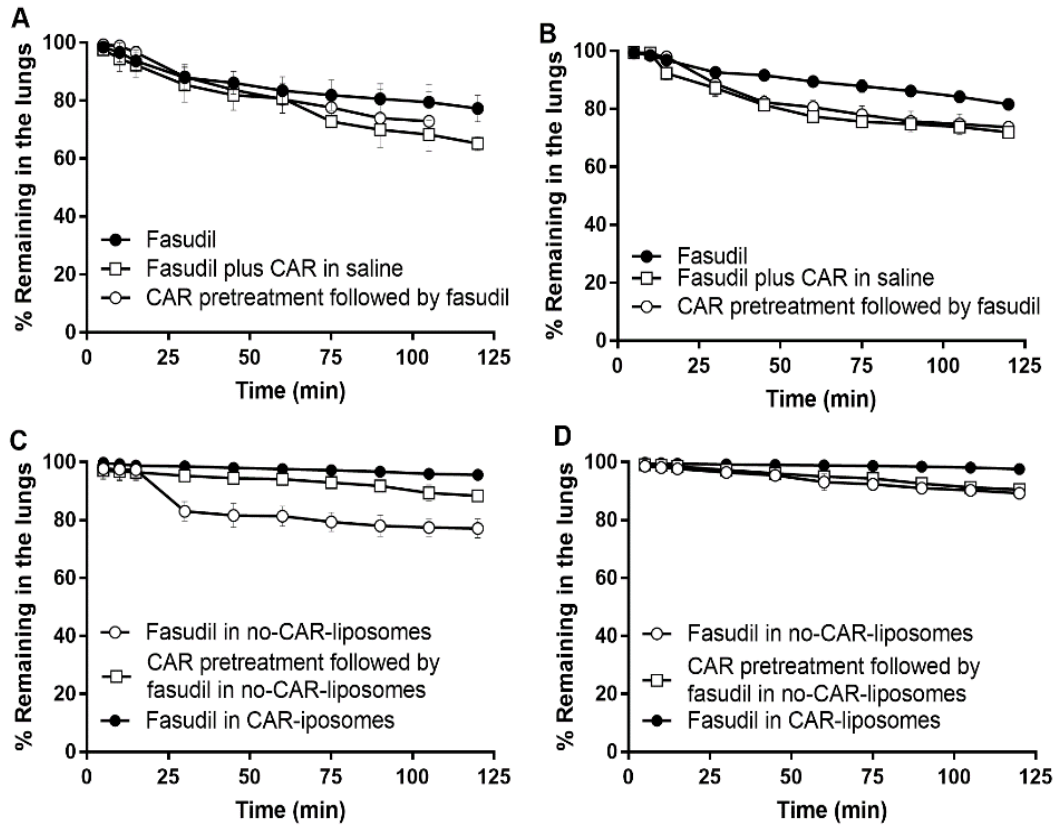
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Owner	nmsu	Points Count	32768	Pulse Sequence	zg30
SW(cyclical) (Hz)	8012.82	Solvent	DMSO-d6	Spectrum Offset (Hz)	2470.8027
Sweep Width (Hz)	8012.58	Temperature (degree C)	22.818	Receiver Gain	181.00
				Spectrum Type	STANDARD



SI Figure 3. ¹H NMR spectra of plain fasudil (A) and CAR-conjugated liposome containing fasudil (B).



SI Figure 4. The percentage of fasudil, calculated, remained in the lungs and IPRL circuitry after perfusing the lungs with plain fasudil and various liposomal formulations of fasudil given via the intravenous-mimicking route (cannulated pulmonary artery) into (A and C) sham and (B and D) PAH lungs. The percentage remained was calculated by subtracting the amount of drug in the perfusate from the total amount added to the perfusion medium.



SI Figure 5. The percentage of fasudil, calculated, remained in the lungs and perfusate circuitry after perfusing the lungs with plain fasudil and various liposomal formulations of fasudil given via the inhalation-mimicking route (intratracheal instillation) into (A and C) sham and (B and D) PAH lungs. The percentage of drug remained was calculated by subtracting the amount of drug in the perfusate from the total amount added to the perfusion medium.