

Annexure A: Ethical application



NORTH-WEST UNIVERSITY
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UNIT FOR DRUG RESEARCH AND DEVELOPMENT

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Research Ethics Committee
North-West University
Potchefstroom Campus
Box116

15 April 2008

Dear Ms Botha

FINAL RESPONSE: ETHICS APPLICATION: NWU-0008-08-S5

The abovementioned application has reference.

We have received satisfactory answers to all the questions posed by the Ethics panel and has therefore found the ethical aspects to be in order.

**PROF. J. DU PLESSIS
DIRECTOR**

Annexure B: Certificate of analysis: Amodiaquine

REPRESENTED BY:
 Fine Chemicals (Pty) Limited
 Box 786
 JONIA 2128
 Johannesburg
 South Africa

Vital Laboratories
 Private Limited

PLANT : Plot No. 1710 & A1/2208, GIDC Estate,
 3rd Phase, VAPI - 396 195, Gujarat, India
 Tele : +91-260-2420154, 2424744
 Fax No. : +91-260-2401497
 E-mail: vitallab@vitallab.com website: www.vitallab.com

CERTIFICATE OF ANALYSIS**AMODIAQUINE HYDROCHLORIDE USP**

| | | | |
|-------------------|--------------|------------------|---------------|
| Manufacturer Name | : Self | A. R. No. | : AAMQ/003/09 |
| License No. | : G/1664 | Mfg. Date | : Feb. - 2009 |
| Batch No. | : AMQ0902003 | Exp. Date | : Jan. - 2014 |
| Batch Size | : 2.0 Kgs. | Date of Analysis | : 20/02/2009 |
| Date of Receipt | : 19/02/2009 | Date of Report | : 20/02/2009 |

| Sr. No. | Test | Result | Standard |
|--|--------------------------------|---|---|
| 1. | Description | Yellow, crystalline powder. Is odorless and has bitter taste. | Yellow, crystalline powder. Is odorless and has bitter taste. |
| 2. | Solubility | Passes | Soluble in water, sparingly soluble in alcohol; very slightly soluble in benzene, in chloroform and in ether. |
| 3. | Identification | Complies Complies Complies | (A) : IR (B) : UV Spectrum (C) : Chloride test |
| 4. | Completeness of solution | Passes | A solution of 200 mg in 10 ml water is clear. |
| 5. | Chromatography purity by TLC. | Passes | As per USP |
| 6. | Water | 8.47 % | 7.0% to 9.0% |
| 7. | Residue on ignition | 0.05 % | NMT 0.2 % |
| 8. | Assay (on dried basis.) | 100.53 % | 97.0 % to 103.0 % |
| 9. | Residual solvent Ethyl alcohol | 145.67 ppm | NMT. 5000 ppm. |
| Remarks: The above sample complies as per USP specification. | | | |
| Analyst By. <i>ecetel</i> | | Checked By. <i>chitlog</i> | Approved By. <i>Sodheni</i> |

Corp. Office :- "VENKATESH" Mahant Road Extn, Uttkarsh Mandal Circle, Vile Parle (E), MUMBAI - 400 057. (INDIA)
 Ph. : +91-22-26183641 / 26136946 32483114 / 5 Fax : +91-22 - 26136945

Annexure C: Median size and span data for Accelerated stability studies

Size determination (Data as processed by FloJo™ $y = 1.607x + 0.4496$)

| Size determination | | Day 1 | 08/06/2010 | | | | |
|--------------------|--------------------|-----------|------------|----------|----------|----------|----------|
| Depth | Name | Statistic | #Cells | LogY | LogX | X Value | Span |
| | 5°C A Liposomes | | 10000 | | | | |
| 5 | 0 | 1.08959 | | 0.037263 | -0.25659 | 0.553875 | 18.47679 |
| 50 | 0 | 1.7338 | | 0.238999 | -0.13105 | 0.739516 | |
| 95 | 0 | 200.5395 | | 2.3022 | 1.152831 | 14.21776 | |
| | 5°C A Liposomes | | 100000 | | | | |
| 5 | 0 | 1.09038 | | 0.037578 | -0.25639 | 0.554125 | 19.5112 |
| 50 | 0 | 1.79029 | | 0.252923 | -0.12239 | 0.754419 | |
| 95 | 0 | 225.0092 | | 2.3522 | 1.183945 | 15.27374 | |
| | 5°C C Liposomes | | 100000 | | | | |
| 5 | 0 | 1.09763 | | 0.040456 | -0.2546 | 0.556415 | 19.17589 |
| 50 | 0 | 2.12055 | | 0.326449 | -0.07663 | 0.838235 | |
| 95 | 0 | 257.9804 | | 2.411587 | 1.2209 | 16.63031 | |
| | 5°C B AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.09113 | | 0.037876 | -0.25621 | 0.554362 | 20.68291 |
| 50 | 0 | 1.80017 | | 0.255314 | -0.1209 | 0.757007 | |
| 95 | 0 | 247.6193 | | 2.393785 | 1.209822 | 16.21147 | |
| | 5°C B AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.0965 | | 0.040009 | -0.25488 | 0.556059 | 20.09281 |
| 50 | 0 | 2.0527 | | 0.312325 | -0.08542 | 0.821442 | |
| 95 | 0 | 268.8049 | | 2.429437 | 1.232008 | 17.06115 | |
| | 5°C C AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.10123 | | 0.041878 | -0.25372 | 0.55755 | 19.63081 |
| 50 | 0 | 2.22267 | | 0.346875 | -0.06392 | 0.863131 | |
| 95 | 0 | 280.0414 | | 2.447222 | 1.243075 | 17.50151 | |
| | 25°C A Liposomes | | 100000 | | | | |
| 5 | 0 | 1.09686 | | 0.040151 | -0.25479 | 0.556172 | 19.57777 |
| 50 | 0 | 2.24501 | | 0.351218 | -0.06122 | 0.868519 | |
| 95 | 0 | 281.5426 | | 2.449544 | 1.24452 | 17.55983 | |
| | 25°C B Liposomes | | 100000 | | | | |
| 5 | 0 | 1.10502 | | 0.04337 | -0.25279 | 0.558743 | 18.59025 |
| 50 | 0 | 2.45919 | | 0.390792 | -0.03659 | 0.91919 | |
| 95 | 0 | 283.7845 | | 2.452989 | 1.246664 | 17.64671 | |
| | 25°C C Liposomes | | 100000 | | | | |
| 5 | 0 | 1.09815 | | 0.040662 | -0.25447 | 0.556579 | 19.57151 |
| 50 | 0 | 2.05772 | | 0.313386 | -0.08476 | 0.822692 | |
| 95 | 0 | 258.6688 | | 2.412744 | 1.22162 | 16.65791 | |
| | 25°C A AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.08907 | | 0.037056 | -0.25672 | 0.553711 | 20.40422 |
| 50 | 0 | 2.05195 | | 0.312167 | -0.08552 | 0.821256 | |
| 95 | 0 | 275.1536 | | 2.439575 | 1.238317 | 17.31079 | |
| | 25°C B | | 100000 | | | | |

| | | | | | | | |
|----|--------------------|----------|--------|----------|----------|----------|----------|
| | AQLiposomes | | | | | | |
| 5 | 0 | 1.07789 | | 0.032574 | -0.25951 | 0.550167 | 20.13788 |
| 50 | 0 | 1.7289 | | 0.23777 | -0.13182 | 0.738215 | |
| 95 | 0 | 228.3926 | | 2.358682 | 1.187979 | 15.41625 | |
| | 25°C C AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.09978 | | 0.041306 | -0.25407 | 0.557093 | 19.45363 |
| 50 | 0 | 2.24852 | | 0.351897 | -0.0608 | 0.869364 | |
| 95 | 0 | 279.2155 | | 2.44594 | 1.242277 | 17.46937 | |
| | 40°C A Liposomes | | 100000 | | | | |
| 5 | 0 | 1.08055 | | 0.033645 | -0.25884 | 0.551011 | 18.09222 |
| 50 | 0 | 1.56447 | | 0.194367 | -0.15883 | 0.693704 | |
| 95 | 0 | 175.8505 | | 2.245144 | 1.117326 | 13.10166 | |
| | 40°C B Liposomes | | 100000 | | | | |
| 5 | 0 | 1.08863 | | 0.03688 | -0.25683 | 0.553572 | 20.71074 |
| 50 | 0 | 1.7688 | | 0.247679 | -0.12565 | 0.748771 | |
| 95 | 0 | 243.9406 | | 2.387284 | 1.205777 | 16.06117 | |
| | 40°C C Liposomes | | 100000 | | | | |
| 5 | 0 | 1.0883 | | 0.036749 | -0.25691 | 0.553467 | 20.8767 |
| 50 | 0 | 1.76669 | | 0.24716 | -0.12597 | 0.748215 | |
| 95 | 0 | 246.6935 | | 2.392158 | 1.20881 | 16.17373 | |
| | 40°C A AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.0834 | | 0.034789 | -0.25813 | 0.551915 | 16.91162 |
| 50 | 0 | 2.22826 | | 0.347966 | -0.06324 | 0.864481 | |
| 95 | 0 | 222.5981 | | 2.347522 | 1.181034 | 15.17169 | |
| | 40°C B AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.08373 | | 0.034921 | -0.25805 | 0.55202 | 15.93867 |
| 50 | 0 | 2.54386 | | 0.405493 | -0.02745 | 0.938757 | |
| 95 | 0 | 230.7376 | | 2.363118 | 1.19074 | 15.51456 | |
| | 40°C C AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.06491 | | 0.027313 | -0.26278 | 0.546035 | 18.50859 |
| 50 | 0 | 1.75293 | | 0.243765 | -0.12809 | 0.744583 | |
| 95 | 0 | 203.0262 | | 2.307552 | 1.156162 | 14.32722 | |

| Size determination | | Day 7 | 15/06/2010 | | | | |
|--------------------|-----------------|-----------|------------|----------|----------|----------|----------|
| Depth | Name | Statistic | #Cells | LogY | LogX | X Value | Span |
| | 5°C A Liposomes | | 100000 | | | | |
| 5 | 0 | 1.07305 | | 0.03062 | -0.26072 | 0.548628 | 10.19214 |
| 50 | 0 | 1.45653 | | 0.163319 | -0.17815 | 0.66352 | |
| 95 | 0 | 68.8717 | | 1.838041 | 0.863996 | 7.311315 | |
| | 5°C A Liposomes | | 100000 | | | | |
| 5 | 0 | 1.08499 | | 0.035426 | -0.25773 | 0.552419 | 20.67617 |
| 50 | 0 | 1.76968 | | 0.247895 | -0.12552 | 0.749003 | |
| 95 | 0 | 243.3977 | | 2.386317 | 1.205175 | 16.03892 | |
| | 5°C C Liposomes | | 100000 | | | | |
| 5 | 0 | 1.0816 | | 0.034067 | -0.25858 | 0.551344 | 19.74557 |
| 50 | 0 | 1.62287 | | 0.210284 | -0.14892 | 0.709707 | |
| 95 | 0 | 208.4661 | | 2.319036 | 1.163308 | 14.56491 | |
| | 5°C B | | 100000 | | | | |

| | | | | | | | |
|----|--------------------|----------|--------|----------|----------|----------|----------|
| | AQLiposomes | | | | | | |
| 5 | 0 | 1.07491 | | 0.031372 | -0.26025 | 0.54922 | 21.60012 |
| 50 | 0 | 1.83425 | | 0.263459 | -0.11583 | 0.765893 | |
| 95 | 0 | 269.6019 | | 2.430723 | 1.232808 | 17.09261 | |
| | 5°C B AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.069 | | 0.028978 | -0.26174 | 0.547339 | 22.0065 |
| 50 | 0 | 1.5797 | | 0.198575 | -0.15621 | 0.697899 | |
| 95 | 0 | 240.1559 | | 2.380493 | 1.201551 | 15.90565 | |
| | 5°C C AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.08139 | | 0.033982 | -0.25863 | 0.551278 | 21.75437 |
| 50 | 0 | 1.93675 | | 0.287074 | -0.10114 | 0.792252 | |
| 95 | 0 | 287.3986 | | 2.458485 | 1.250084 | 17.78622 | |
| | 25°C A Liposomes | | 100000 | | | | |
| 5 | 0 | 1.07898 | | 0.033013 | -0.25923 | 0.550513 | 21.2092 |
| 50 | 0 | 1.61613 | | 0.208476 | -0.15005 | 0.707871 | |
| 95 | 0 | 231.9177 | | 2.365334 | 1.192118 | 15.56389 | |
| | 25°C B Liposomes | | 100000 | | | | |
| 5 | 0 | 1.07805 | | 0.032639 | -0.25947 | 0.550218 | 21.61216 |
| 50 | 0 | 1.67065 | | 0.222885 | -0.14108 | 0.722638 | |
| 95 | 0 | 246.5528 | | 2.39191 | 1.208656 | 16.16798 | |
| | 25°C C Liposomes | | 100000 | | | | |
| 5 | 0 | 1.09216 | | 0.038286 | -0.25595 | 0.554688 | 20.55124 |
| 50 | 0 | 2.04261 | | 0.310185 | -0.08675 | 0.818928 | |
| 95 | 0 | 277.0431 | | 2.442547 | 1.240166 | 17.38467 | |
| | 25°C A AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.1225 | | 0.050186 | -0.24855 | 0.564227 | 15.35992 |
| 50 | 0 | 2.19495 | | 0.341425 | -0.06732 | 0.856416 | |
| 95 | 0 | 189.3488 | | 2.277262 | 1.137313 | 13.71871 | |
| | 25°C B AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.11076 | | 0.04562 | -0.25139 | 0.560548 | 15.56098 |
| 50 | 0 | 2.05157 | | 0.312086 | -0.08557 | 0.821161 | |
| 95 | 0 | 180.9893 | | 2.257653 | 1.125111 | 13.33862 | |
| | 25°C C AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.1008 | | 0.041708 | -0.25382 | 0.557414 | 14.97836 |
| 50 | 0 | 1.93329 | | 0.286297 | -0.10162 | 0.791371 | |
| 95 | 0 | 161.1905 | | 2.20734 | 1.093802 | 12.41086 | |
| | 40°C A Liposomes | | 100000 | | | | |
| 5 | 0 | 1.06908 | | 0.02901 | -0.26172 | 0.547364 | 20.53185 |
| 50 | 0 | 1.4423 | | 0.159056 | -0.1808 | 0.659479 | |
| 95 | 0 | 197.5991 | | 2.295785 | 1.148839 | 14.08768 | |
| | 40°C B Liposomes | | 100000 | | | | |
| 5 | 0 | 1.07108 | | 0.029822 | -0.26122 | 0.548001 | 21.91706 |
| 50 | 0 | 1.54931 | | 0.190138 | -0.16146 | 0.689514 | |
| 95 | 0 | 234.2261 | | 2.369635 | 1.194795 | 15.66011 | |
| | 40°C C Liposomes | | 100000 | | | | |
| 5 | 0 | 1.06977 | | 0.02929 | -0.26155 | 0.547584 | 21.84482 |
| 50 | 0 | 1.53418 | | 0.185876 | -0.16411 | 0.685316 | |
| 95 | 0 | 230.8242 | | 2.363281 | 1.190841 | 15.51818 | |
| | 40°C A | | 100000 | | | | |

| | | AQLiposomes | | | | | |
|----|---|-----------------------|--|----------|----------|----------|----------|
| 5 | 0 | 1.05528 | | 0.023368 | -0.26523 | 0.542957 | 19.23488 |
| 50 | 0 | 1.46373 | | 0.165461 | -0.17681 | 0.665559 | |
| 95 | 0 | 181.1266 | | 2.257982 | 1.125316 | 13.34491 | |
| | | 40°C B AQLiposomes | | 100000 | | | |
| 5 | 0 | 1.05759 | | 0.024317 | -0.26464 | 0.543696 | 15.78252 |
| 50 | 0 | 1.4929 | | 0.174031 | -0.17148 | 0.673782 | |
| 95 | 0 | 136.2388 | | 2.134301 | 1.048351 | 11.17767 | |
| | | 40°C C AQLiposomes | | 100000 | | | |
| 5 | 0 | 1.06814 | | 0.028628 | -0.26196 | 0.547065 | 17.38563 |
| 50 | 0 | 1.99207 | | 0.299305 | -0.09353 | 0.806259 | |
| 95 | 0 | 208.4541 | | 2.319011 | 1.163292 | 14.56439 | |

| Size determination | | Day 14 | 22/06/2010 | | | | |
|--------------------|------|----------------------|------------|----------|----------|----------|----------|
| Depth | Name | Statistic | #Cells | LogY | LogX | X Value | Span |
| | | 5°C A Liposomes | | 100000 | | | |
| 5 | 0 | 1.06782 | | 0.028498 | -0.26204 | 0.546963 | 19.75836 |
| 50 | 0 | 1.40554 | | 0.147843 | -0.18778 | 0.648968 | |
| 95 | 0 | 181.6636 | | 2.259268 | 1.126116 | 13.36951 | |
| | | 5°C A Liposomes | | 100000 | | | |
| 5 | 0 | 1.05694 | | 0.02405 | -0.26481 | 0.543488 | 11.33937 |
| 50 | 0 | 1.29947 | | 0.113766 | -0.20898 | 0.618042 | |
| 95 | 0 | 72.54674 | | 1.860618 | 0.878045 | 7.5517 | |
| | | 5°C C Liposomes | | 100000 | | | |
| 5 | 0 | 1.07867 | | 0.032889 | -0.25931 | 0.550414 | 20.25588 |
| 50 | 0 | 1.94665 | | 0.289288 | -0.09976 | 0.79477 | |
| 95 | 0 | 258.4509 | | 2.412378 | 1.221393 | 16.64918 | |
| | | 5°C B AQLiposomes | | 100000 | | | |
| 5 | 0 | 1.09872 | | 0.040887 | -0.25433 | 0.556759 | 17.8364 |
| 50 | 0 | 2.45748 | | 0.39049 | -0.03678 | 0.918792 | |
| 95 | 0 | 265.8628 | | 2.424658 | 1.229034 | 16.9447 | |
| | | 5°C B AQLiposomes | | 100000 | | | |
| 5 | 0 | 1.1243 | | 0.050882 | -0.24811 | 0.56479 | 15.13115 |
| 50 | 0 | 2.59602 | | 0.414308 | -0.02196 | 0.950689 | |
| 95 | 0 | 217.39 | | 2.33724 | 1.174636 | 14.94981 | |
| | | 5°C C AQLiposomes | | 100000 | | | |
| 5 | 0 | 1.13018 | | 0.053148 | -0.2467 | 0.566626 | 14.87745 |
| 50 | 0 | 2.48067 | | 0.394569 | -0.03424 | 0.924178 | |
| 95 | 0 | 202.7715 | | 2.307007 | 1.155823 | 14.31603 | |
| | | 25°C A Liposomes | | 100000 | | | |
| 5 | 0 | 1.08919 | | 0.037104 | -0.25669 | 0.553749 | 19.36374 |
| 50 | 0 | 1.89247 | | 0.277029 | -0.10739 | 0.780932 | |
| 95 | 0 | 234.5962 | | 2.370321 | 1.195222 | 15.67551 | |
| | | 25°C B Liposomes | | 100000 | | | |
| 5 | 0 | 1.08209 | | 0.034263 | -0.25845 | 0.5515 | 18.44548 |
| 50 | 0 | 1.60287 | | 0.204898 | -0.15227 | 0.704251 | |
| 95 | 0 | 185.4391 | | 2.268201 | 1.131675 | 13.54175 | |

| | | | | | | | |
|----|--------------------|----------|--------|----------|----------|----------|----------|
| | 25°C C Liposomes | | 100000 | | | | |
| 5 | 0 | 1.07748 | | 0.032409 | -0.25961 | 0.550037 | 16.79248 |
| 50 | 0 | 1.47839 | | 0.169789 | -0.17412 | 0.669699 | |
| 95 | 0 | 148.5508 | | 2.171875 | 1.071733 | 11.79595 | |
| | 25°C A AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.12676 | | 0.051831 | -0.24752 | 0.565559 | 14.13428 |
| 50 | 0 | 2.21325 | | 0.34503 | -0.06507 | 0.860852 | |
| 95 | 0 | 167.9688 | | 2.225229 | 1.104934 | 12.73309 | |
| | 25°C B AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.1298 | | 0.053002 | -0.24679 | 0.566508 | 14.47732 |
| 50 | 0 | 2.2702 | | 0.356064 | -0.05821 | 0.87457 | |
| 95 | 0 | 178.5822 | | 2.251838 | 1.121492 | 13.22794 | |
| | 25°C C AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.13768 | | 0.05602 | -0.24492 | 0.568963 | 14.84319 |
| 50 | 0 | 2.53008 | | 0.403134 | -0.02891 | 0.93559 | |
| 95 | 0 | 205.9691 | | 2.313802 | 1.160051 | 14.4561 | |
| | 40°C A Liposomes | | 100000 | | | | |
| 5 | 0 | 1.08716 | | 0.036293 | -0.25719 | 0.553106 | 19.24837 |
| 50 | 0 | 2.06117 | | 0.314114 | -0.08431 | 0.82355 | |
| 95 | 0 | 252.3895 | | 2.402071 | 1.214979 | 16.4051 | |
| | 40°C B Liposomes | | 100000 | | | | |
| 5 | 0 | 1.07932 | | 0.03315 | -0.25915 | 0.550621 | 20.69654 |
| 50 | 0 | 1.68519 | | 0.226649 | -0.13874 | 0.726545 | |
| 95 | 0 | 232.4854 | | 2.366396 | 1.192779 | 15.58759 | |
| | 40°C C Liposomes | | 100000 | | | | |
| 5 | 0 | 1.07455 | | 0.031227 | -0.26034 | 0.549105 | 19.33864 |
| 50 | 0 | 1.46056 | | 0.164519 | -0.1774 | 0.664662 | |
| 95 | 0 | 182.3901 | | 2.261001 | 1.127194 | 13.40276 | |
| | 40°C A AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.06894 | | 0.028953 | -0.26176 | 0.54732 | 16.99033 |
| 50 | 0 | 1.76792 | | 0.247463 | -0.12579 | 0.748539 | |
| 95 | 0 | 179.3922 | | 2.253803 | 1.122715 | 13.26525 | |
| | 40°C B AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.07654 | | 0.03203 | -0.25984 | 0.549738 | 14.82739 |
| 50 | 0 | 2.26811 | | 0.355664 | -0.05845 | 0.874069 | |
| 95 | 0 | 184.7387 | | 2.266558 | 1.130652 | 13.5099 | |
| | 40°C C AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.0715 | | 0.029992 | -0.26111 | 0.548135 | 16.51653 |
| 50 | 0 | 1.81088 | | 0.25789 | -0.1193 | 0.759806 | |
| 95 | 0 | 175.7608 | | 2.244922 | 1.117189 | 13.0975 | |

| Size determination | | Day 21 | 29/06/2010 | | | | |
|--------------------|-----------------|-----------|------------|----------|----------|----------|----------|
| Depth | Name | Statistic | #Cells | LogY | LogX | X Value | Span |
| | 5°C A Liposomes | | 10000 | | | | |
| 5 | 0 | 1.07074 | | 0.029684 | -0.2613 | 0.547893 | 17.35238 |
| 50 | 0 | 1.4104 | | 0.149342 | -0.18684 | 0.650364 | |

| | | | | | | | |
|----|--------------------|----------|--------|----------|----------|----------|----------|
| 95 | 0 | 149.3064 | | 2.174078 | 1.073104 | 11.83325 | |
| | 5°C A Liposomes | | 100000 | | | | |
| 5 | 0 | 1.07994 | | 0.0334 | -0.25899 | 0.550818 | 19.37945 |
| 50 | 0 | 1.68198 | | 0.225821 | -0.13925 | 0.725683 | |
| 95 | 0 | 209.6003 | | 2.321392 | 1.164774 | 14.61417 | |
| | 5°C C Liposomes | | 100000 | | | | |
| 5 | 0 | 1.0926 | | 0.038461 | -0.25584 | 0.554827 | 18.14915 |
| 50 | 0 | 2.25995 | | 0.354099 | -0.05943 | 0.872111 | |
| 95 | 0 | 251.8408 | | 2.401126 | 1.214391 | 16.3829 | |
| | 5°C B AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.13964 | | 0.056768 | -0.24445 | 0.569573 | 14.45646 |
| 50 | 0 | 2.94724 | | 0.469416 | 0.012331 | 1.028799 | |
| 95 | 0 | 229.0147 | | 2.359863 | 1.188714 | 15.44237 | |
| | 5°C B AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.10793 | | 0.044512 | -0.25208 | 0.559658 | 15.2448 |
| 50 | 0 | 2.34414 | | 0.369984 | -0.04954 | 0.892188 | |
| 95 | 0 | 199.2519 | | 2.299402 | 1.151091 | 14.16089 | |
| | 5°C C AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.10474 | | 0.04326 | -0.25286 | 0.558655 | 15.44521 |
| 50 | 0 | 2.37526 | | 0.375711 | -0.04598 | 0.89954 | |
| 95 | 0 | 205.8809 | | 2.313616 | 1.159935 | 14.45224 | |
| | 25°C A Liposomes | | 100000 | | | | |
| 5 | 0 | 1.1148 | | 0.047197 | -0.25041 | 0.561815 | 16.88696 |
| 50 | 0 | 2.22635 | | 0.347593 | -0.06348 | 0.86402 | |
| 95 | 0 | 222.1454 | | 2.346637 | 1.180484 | 15.15248 | |
| | 25°C B Liposomes | | 100000 | | | | |
| 5 | 0 | 1.11301 | | 0.046499 | -0.25084 | 0.561254 | 17.13535 |
| 50 | 0 | 2.21996 | | 0.346345 | -0.06425 | 0.862476 | |
| 95 | 0 | 226.5816 | | 2.355225 | 1.185827 | 15.34007 | |
| | 25°C C Liposomes | | 100000 | | | | |
| 5 | 0 | 1.09388 | | 0.03897 | -0.25553 | 0.555231 | 18.85024 |
| 50 | 0 | 1.96343 | | 0.293015 | -0.09744 | 0.799026 | |
| 95 | 0 | 233.1923 | | 2.367714 | 1.193599 | 15.61706 | |
| | 25°C A AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.13423 | | 0.054701 | -0.24574 | 0.567889 | 14.17276 |
| 50 | 0 | 2.55796 | | 0.407894 | -0.02595 | 0.941992 | |
| 95 | 0 | 193.7999 | | 2.287354 | 1.143593 | 13.91851 | |
| | 25°C B AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.12218 | | 0.050063 | -0.24862 | 0.564127 | 14.31596 |
| 50 | 0 | 2.34759 | | 0.370622 | -0.04915 | 0.893005 | |
| 95 | 0 | 181.2017 | | 2.258162 | 1.125428 | 13.34835 | |
| | 25°C C AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.17553 | | 0.070234 | -0.23607 | 0.580669 | 12.70445 |
| 50 | 0 | 3.50657 | | 0.544883 | 0.059292 | 1.146284 | |
| 95 | 0 | 221.9357 | | 2.346227 | 1.180228 | 15.14358 | |
| | 40°C A Liposomes | | 100000 | | | | |
| 5 | 0 | 1.08388 | | 0.034981 | -0.25801 | 0.552067 | 19.12012 |
| 50 | 0 | 2.0615 | | 0.314183 | -0.08427 | 0.823632 | |

| | | | | | | | |
|----|--------------------|----------|--------|----------|----------|----------|----------|
| 95 | 0 | 249.7964 | | 2.397586 | 1.212188 | 16.30001 | |
| | 40°C B Liposomes | | 100000 | | | | |
| 5 | 0 | 1.0878 | | 0.036549 | -0.25703 | 0.553309 | 19.30585 |
| 50 | 0 | 2.06276 | | 0.314449 | -0.0841 | 0.823945 | |
| 95 | 0 | 253.7548 | | 2.404414 | 1.216437 | 16.46027 | |
| | 40°C C Liposomes | | 100000 | | | | |
| 5 | 0 | 1.08736 | | 0.036373 | -0.25714 | 0.55317 | 19.2897 |
| 50 | 0 | 1.97943 | | 0.29654 | -0.09525 | 0.803072 | |
| 95 | 0 | 243.5259 | | 2.386545 | 1.205317 | 16.04418 | |
| | 40°C A AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.07003 | | 0.029396 | -0.26148 | 0.547667 | 13.81955 |
| 50 | 0 | 2.11224 | | 0.324743 | -0.0777 | 0.836189 | |
| 95 | 0 | 154.8223 | | 2.189834 | 1.082908 | 12.10343 | |
| | 40°C B AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.07867 | | 0.032889 | -0.25931 | 0.550414 | 15.65404 |
| 50 | 0 | 2.3365 | | 0.368566 | -0.05043 | 0.890378 | |
| 95 | 0 | 206.7098 | | 2.315361 | 1.161021 | 14.48842 | |
| | 40°C C AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.08814 | | 0.036685 | -0.25695 | 0.553417 | 13.58407 |
| 50 | 0 | 3.04554 | | 0.483664 | 0.021197 | 1.05002 | |
| 95 | 0 | 214.2938 | | 2.33101 | 1.170759 | 14.81695 | |

| Size determination | | Day 28 | 06/07/2010 | | | | |
|--------------------|-------------------|-----------|------------|----------|----------|----------|----------|
| Depth | Name | Statistic | #Cells | LogY | LogX | X Value | Span |
| | 5°C A Liposomes | | 10000 | | | | |
| 5 | 0 | 1.0702 | | 0.029465 | -0.26144 | 0.547721 | 23.9163 |
| 50 | 0 | 1.47068 | | 0.167518 | -0.17553 | 0.667524 | |
| 95 | 0 | 255.048 | | 2.406622 | 1.217811 | 16.51242 | |
| | 5°C A Liposomes | | 100000 | | | | |
| 5 | 0 | 1.07911 | | 0.033066 | -0.2592 | 0.550554 | 21.62521 |
| 50 | 0 | 1.85242 | | 0.267739 | -0.11317 | 0.770606 | |
| 95 | 0 | 272.7126 | | 2.435705 | 1.235909 | 17.21506 | |
| | 5°C C Liposomes | | 100000 | | | | |
| 5 | 0 | 1.07075 | | 0.029688 | -0.2613 | 0.547896 | 23.71221 |
| 50 | 0 | 1.4175 | | 0.151523 | -0.18549 | 0.652399 | |
| 95 | 0 | 242.8809 | | 2.385393 | 1.204601 | 16.01772 | |
| | 5°C B AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.11167 | | 0.045976 | -0.25117 | 0.560833 | 17.63926 |
| 50 | 0 | 2.28107 | | 0.358139 | -0.05691 | 0.877174 | |
| 95 | 0 | 243.2663 | | 2.386082 | 1.205029 | 16.03353 | |
| | 5°C B AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.11614 | | 0.047719 | -0.25008 | 0.562236 | 17.36643 |
| 50 | 0 | 2.40064 | | 0.380327 | -0.04311 | 0.905509 | |
| 95 | 0 | 249.4932 | | 2.397059 | 1.21186 | 16.2877 | |
| | 5°C C AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.11437 | | 0.047029 | -0.25051 | 0.561681 | 17.32262 |

| | | | | | | | |
|----|---------------------|----------|--------|----------|----------|----------|----------|
| 50 | 0 | 2.30384 | | 0.362452 | -0.05423 | 0.882612 | |
| 95 | 0 | 238.8273 | | 2.378084 | 1.200052 | 15.85084 | |
| | 25° C A Liposomes | | 100000 | | | | |
| 5 | 0 | 1.11075 | | 0.045616 | -0.25139 | 0.560544 | 18.32789 |
| 50 | 0 | 1.97821 | | 0.296272 | -0.09541 | 0.802764 | |
| 95 | 0 | 225.0036 | | 2.35219 | 1.183939 | 15.27351 | |
| | 25° C B Liposomes | | 100000 | | | | |
| 5 | 0 | 1.1048 | | 0.043284 | -0.25284 | 0.558674 | 18.24798 |
| 50 | 0 | 1.79809 | | 0.254811 | -0.12121 | 0.756463 | |
| 95 | 0 | 203.8323 | | 2.309273 | 1.157233 | 14.36259 | |
| | 25° C C Liposomes | | 100000 | | | | |
| 5 | 0 | 1.09647 | | 0.039997 | -0.25489 | 0.556049 | 19.27634 |
| 50 | 0 | 1.86851 | | 0.271495 | -0.11083 | 0.774764 | |
| 95 | 0 | 230.1668 | | 2.362043 | 1.19007 | 15.49067 | |
| | 25° C A AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.12873 | | 0.05259 | -0.24705 | 0.566174 | 14.22973 |
| 50 | 0 | 3.02689 | | 0.480997 | 0.019537 | 1.046014 | |
| 95 | 0 | 229.2124 | | 2.360238 | 1.188947 | 15.45066 | |
| | 25° C B AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.10961 | | 0.04517 | -0.25167 | 0.560186 | 16.87125 |
| 50 | 0 | 2.16483 | | 0.335424 | -0.07105 | 0.849084 | |
| 95 | 0 | 215.8843 | | 2.334221 | 1.172757 | 14.88529 | |
| | 25° C C AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.12444 | | 0.050936 | -0.24808 | 0.564834 | 13.46399 |
| 50 | 0 | 2.87778 | | 0.459058 | 0.005885 | 1.013644 | |
| 95 | 0 | 200.4207 | | 2.301943 | 1.152671 | 14.21252 | |
| | 40° C A Liposomes | | 100000 | | | | |
| 5 | 0 | 1.07203 | | 0.030207 | -0.26098 | 0.548304 | 23.23245 |
| 50 | 0 | 1.38731 | | 0.142174 | -0.1913 | 0.643718 | |
| 95 | 0 | 230.4719 | | 2.362618 | 1.190428 | 15.50344 | |
| | 40° C B Liposomes | | 100000 | | | | |
| 5 | 0 | 1.08211 | | 0.034271 | -0.25845 | 0.551506 | 20.37926 |
| 50 | 0 | 2.12792 | | 0.327955 | -0.0757 | 0.840046 | |
| 95 | 0 | 284.4132 | | 2.45395 | 1.247262 | 17.67103 | |
| | 40° C C Liposomes | | 100000 | | | | |
| 5 | 0 | 1.07913 | | 0.033074 | -0.25919 | 0.550561 | 21.82366 |
| 50 | 0 | 1.77456 | | 0.249091 | -0.12477 | 0.750287 | |
| 95 | 0 | 265.3555 | | 2.423828 | 1.228518 | 16.92458 | |
| | 40° C A AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.06743 | | 0.028339 | -0.26214 | 0.546838 | 18.81177 |
| 50 | 0 | 1.72966 | | 0.237961 | -0.1317 | 0.738417 | |
| 95 | 0 | 205.5497 | | 2.312917 | 1.1595 | 14.43777 | |
| | 40° C B AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.06598 | | 0.027749 | -0.26251 | 0.546376 | 20.15615 |
| 50 | 0 | 1.60527 | | 0.205548 | -0.15187 | 0.704907 | |
| 95 | 0 | 212.8462 | | 2.328066 | 1.168927 | 14.75459 | |
| | 40° C C AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.07568 | | 0.031683 | -0.26006 | 0.549465 | 18.56706 |

| | | | | | | | |
|----|---|----------|--|----------|----------|----------|--|
| 50 | 0 | 1.86008 | | 0.269532 | -0.11205 | 0.772587 | |
| 95 | 0 | 216.0904 | | 2.334635 | 1.173015 | 14.89413 | |

| Size determination | | Day 42 | 20/07/2010 | | | | |
|--------------------|---------------------------------|-----------|------------|----------|----------|----------|----------|
| Depth | Name | Statistic | #Cells | LogY | LogX | X Value | Span |
| | 5 ⁰ C A Liposomes | | 10000 | | | | |
| 5 | 0 | 1.07017 | | 0.029453 | -0.26145 | 0.547711 | 23.41984 |
| 50 | 0 | 1.43396 | | 0.156537 | -0.18237 | 0.657103 | |
| 95 | 0 | 240.9159 | | 2.381865 | 1.202405 | 15.93696 | |
| | 5 ⁰ C A Liposomes | | 100000 | | | | |
| 5 | 0 | 1.08899 | | 0.037024 | -0.25674 | 0.553686 | 19.72904 |
| 50 | 0 | 2.27571 | | 0.357117 | -0.05755 | 0.875891 | |
| 95 | 0 | 288.6444 | | 2.460363 | 1.251253 | 17.83416 | |
| | 5 ⁰ C C Liposomes | | 100000 | | | | |
| 5 | 0 | 1.087 | | 0.03623 | -0.25723 | 0.553056 | 20.07182 |
| 50 | 0 | 2.2294 | | 0.348188 | -0.06311 | 0.864756 | |
| 95 | 0 | 290.6267 | | 2.463336 | 1.253102 | 17.91028 | |
| | 5 ⁰ C B AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.1016 | | 0.042024 | -0.25363 | 0.557667 | 17.64305 |
| 50 | 0 | 2.04452 | | 0.310591 | -0.0865 | 0.819404 | |
| 95 | 0 | 218.9025 | | 2.340251 | 1.176509 | 15.01445 | |
| | 5 ⁰ C B AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.14854 | | 0.060146 | -0.24235 | 0.572337 | 15.346 |
| 50 | 0 | 3.08402 | | 0.489117 | 0.024591 | 1.058256 | |
| 95 | 0 | 262.5331 | | 2.419184 | 1.225628 | 16.81233 | |
| | 5 ⁰ C C AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.11245 | | 0.046281 | -0.25098 | 0.561078 | 17.31351 |
| 50 | 0 | 2.31789 | | 0.365093 | -0.05259 | 0.885958 | |
| 95 | 0 | 240.0217 | | 2.38025 | 1.2014 | 15.90012 | |
| | 25 ⁰ C A Liposomes | | 100000 | | | | |
| 5 | 0 | 1.17433 | | 0.06979 | -0.23635 | 0.5803 | 14.9429 |
| 50 | 0 | 2.63292 | | 0.420438 | -0.01815 | 0.959076 | |
| 95 | 0 | 216.4995 | | 2.335457 | 1.173526 | 14.91167 | |
| | 25 ⁰ C B Liposomes | | 100000 | | | | |
| 5 | 0 | 1.16469 | | 0.06621 | -0.23857 | 0.577331 | 15.70374 |
| 50 | 0 | 2.54449 | | 0.405601 | -0.02738 | 0.938902 | |
| 95 | 0 | 226.1433 | | 2.354384 | 1.185304 | 15.3216 | |
| | 25 ⁰ C C Liposomes | | 100000 | | | | |
| 5 | 0 | 1.1286 | | 0.05254 | -0.24708 | 0.566133 | 17.35799 |
| 50 | 0 | 2.19844 | | 0.342115 | -0.06689 | 0.857263 | |
| 95 | 0 | 229.1133 | | 2.36005 | 1.18883 | 15.44651 | |
| | 25 ⁰ C A AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.11093 | | 0.045687 | -0.25135 | 0.560601 | 8.933321 |
| 50 | 0 | 2.80073 | | 0.447271 | -0.00145 | 0.996669 | |
| 95 | 0 | 104.2712 | | 2.018164 | 0.976082 | 9.464164 | |
| | 25 ⁰ C B AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.10709 | | 0.044183 | -0.25228 | 0.559394 | 14.25664 |
| 50 | 0 | 2.6633 | | 0.42542 | -0.01505 | 0.965947 | |

| | | | | | | | |
|----|------------------------|----------|--------|----------|----------|----------|----------|
| 95 | 0 | 203.1023 | | 2.307715 | 1.156263 | 14.33056 | |
| | 25° C C AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.11786 | | 0.048387 | -0.24967 | 0.562775 | 8.785254 |
| 50 | 0 | 2.88704 | | 0.460453 | 0.006753 | 1.015672 | |
| 95 | 0 | 104.6529 | | 2.019751 | 0.97707 | 9.485711 | |
| | 40° C A Liposomes | | 100000 | | | | |
| 5 | 0 | 1.08626 | | 0.035934 | -0.25742 | 0.552821 | 19.54854 |
| 50 | 0 | 2.26318 | | 0.354719 | -0.05904 | 0.872886 | |
| 95 | 0 | 283.0036 | | 2.451792 | 1.245919 | 17.61648 | |
| | 40° C B Liposomes | | 100000 | | | | |
| 5 | 0 | 1.08228 | | 0.03434 | -0.25841 | 0.55156 | 21.80746 |
| 50 | 0 | 1.86161 | | 0.269889 | -0.11183 | 0.772983 | |
| 95 | 0 | 277.6498 | | 2.443497 | 1.240758 | 17.40835 | |
| | 40° C C Liposomes | | 100000 | | | | |
| 5 | 0 | 1.08665 | | 0.03609 | -0.25732 | 0.552945 | 19.75242 |
| 50 | 0 | 2.2902 | | 0.359873 | -0.05583 | 0.879357 | |
| 95 | 0 | 290.9421 | | 2.463807 | 1.253396 | 17.92237 | |
| | 40° C A AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.07622 | | 0.031901 | -0.25992 | 0.549636 | 18.09569 |
| 50 | 0 | 2.03258 | | 0.308048 | -0.08808 | 0.816423 | |
| 95 | 0 | 226.1853 | | 2.354464 | 1.185354 | 15.32337 | |
| | 40° C B AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.07298 | | 0.030592 | -0.26074 | 0.548606 | 16.41876 |
| 50 | 0 | 1.93359 | | 0.286364 | -0.10158 | 0.791448 | |
| 95 | 0 | 185.4709 | | 2.268276 | 1.131721 | 13.54319 | |
| | 40° C C AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.07212 | | 0.030243 | -0.26096 | 0.548332 | 18.47233 |
| 50 | 0 | 1.90038 | | 0.27884 | -0.10626 | 0.782961 | |
| 95 | 0 | 218.8322 | | 2.340111 | 1.176423 | 15.01145 | |

| Size determination | | Day 70 | 17/08/2010 | | | | |
|--------------------|-----------------------|-----------|------------|----------|----------|----------|----------|
| Depth | Name | Statistic | #Cells | LogY | LogX | X Value | Span |
| | 5° C A Liposomes | | 10000 | | | | |
| 5 | 0 | 1.07396 | | 0.030988 | -0.26049 | 0.548918 | 26.0546 |
| 50 | 0 | 1.56378 | | 0.194176 | -0.15894 | 0.693514 | |
| 95 | 0 | 309.3057 | | 2.490388 | 1.269936 | 18.61815 | |
| | 5° C A Liposomes | | 100000 | | | | |
| 5 | 0 | 1.07606 | | 0.031836 | -0.25996 | 0.549585 | 24.65788 |
| 50 | 0 | 1.72581 | | 0.236993 | -0.1323 | 0.737394 | |
| 95 | 0 | 312.355 | | 2.494648 | 1.272588 | 18.73215 | |
| | 5° C C Liposomes | | 100000 | | | | |
| 5 | 0 | 1.08486 | | 0.035374 | -0.25776 | 0.552378 | 20.5755 |
| 50 | 0 | 2.40561 | | 0.381225 | -0.04255 | 0.906676 | |
| 95 | 0 | 325.1952 | | 2.512144 | 1.283475 | 19.20768 | |
| | 5° C B AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.13708 | | 0.055791 | -0.24506 | 0.568776 | 17.56733 |
| 50 | 0 | 2.6442 | | 0.422294 | -0.01699 | 0.961631 | |
| 95 | 0 | 279.0277 | | 2.445647 | 1.242095 | 17.46206 | |

| | | | | | | | |
|----|------------------------|----------|--------|----------|----------|----------|----------|
| | 5° C B AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.12569 | | 0.051419 | -0.24778 | 0.565224 | 18.25054 |
| 50 | 0 | 2.41659 | | 0.383203 | -0.04132 | 0.909249 | |
| 95 | 0 | 271.2995 | | 2.433449 | 1.234505 | 17.1595 | |
| | 5° C C AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.13421 | | 0.054693 | -0.24574 | 0.567883 | 17.68894 |
| 50 | 0 | 2.50269 | | 0.398407 | -0.03186 | 0.929274 | |
| 95 | 0 | 267.4037 | | 2.427167 | 1.230596 | 17.00575 | |
| | 25° C A Liposomes | | 100000 | | | | |
| 5 | 0 | 1.10595 | | 0.043735 | -0.25256 | 0.559036 | 19.30536 |
| 50 | 0 | 1.89915 | | 0.278559 | -0.10643 | 0.782646 | |
| 95 | 0 | 234.4228 | | 2.37 | 1.195022 | 15.66829 | |
| | 25° C B Liposomes | | 100000 | | | | |
| 5 | 0 | 1.11753 | | 0.048259 | -0.24975 | 0.562671 | 17.60756 |
| 50 | 0 | 2.43496 | | 0.386492 | -0.03927 | 0.913543 | |
| 95 | 0 | 258.4201 | | 2.412326 | 1.221361 | 16.64794 | |
| | 25° C C Liposomes | | 100000 | | | | |
| 5 | 0 | 1.09993 | | 0.041365 | -0.25404 | 0.55714 | 19.34851 |
| 50 | 0 | 1.74885 | | 0.242753 | -0.12872 | 0.743504 | |
| 95 | 0 | 217.2271 | | 2.336914 | 1.174433 | 14.94284 | |
| | 25° C A AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.08836 | | 0.036773 | -0.25689 | 0.553486 | 3.160192 |
| 50 | 0 | 1.89387 | | 0.27735 | -0.10719 | 0.781291 | |
| 95 | 0 | 16.65529 | | 1.221552 | 0.480369 | 3.022515 | |
| | 25° C B AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.09926 | | 0.0411 | -0.2542 | 0.556929 | 6.878676 |
| 50 | 0 | 2.3724 | | 0.375188 | -0.0463 | 0.898866 | |
| 95 | 0 | 60.42964 | | 1.78125 | 0.828656 | 6.739938 | |
| | 25° C C AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.09591 | | 0.039775 | -0.25502 | 0.555872 | 3.337836 |
| 50 | 0 | 1.93386 | | 0.286425 | -0.10154 | 0.791516 | |
| 95 | 0 | 18.23481 | | 1.260901 | 0.504855 | 3.197824 | |
| | 40° C A Liposomes | | 100000 | | | | |
| 5 | 0 | 1.1275 | | 0.052117 | -0.24735 | 0.56579 | 16.324 |
| 50 | 0 | 2.83966 | | 0.453266 | 0.002281 | 1.005267 | |
| 95 | 0 | 266.6466 | | 2.425936 | 1.229829 | 16.97577 | |
| | 40° C B Liposomes | | 100000 | | | | |
| 5 | 0 | 1.12572 | | 0.05143 | -0.24777 | 0.565234 | 15.41642 |
| 50 | 0 | 3.00514 | | 0.477865 | 0.017588 | 1.04133 | |
| 95 | 0 | 257.6941 | | 2.411104 | 1.2206 | 16.61882 | |
| | 40° C C Liposomes | | 100000 | | | | |
| 5 | 0 | 1.16702 | | 0.067078 | -0.23803 | 0.57805 | 10.46228 |
| 50 | 0 | 5.76553 | | 0.760839 | 0.193677 | 1.561986 | |
| 95 | 0 | 265.24 | | 2.423639 | 1.2284 | 16.91999 | |
| | 40° C A AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.07316 | | 0.030664 | -0.26069 | 0.548663 | 11.51468 |
| 50 | 0 | 2.22849 | | 0.348011 | -0.06322 | 0.864536 | |
| 95 | 0 | 123.278 | | 2.090885 | 1.021335 | 10.50352 | |

| | | | | | | | |
|----|------------------------|----------|--------|----------|----------|----------|----------|
| | 40° C B AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.08677 | | 0.036138 | -0.25729 | 0.552983 | 11.67776 |
| 50 | 0 | 2.17314 | | 0.337088 | -0.07001 | 0.851111 | |
| 95 | 0 | 123.0616 | | 2.090123 | 1.02086 | 10.49205 | |
| | 40° C C AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.07812 | | 0.032667 | -0.25945 | 0.55024 | 9.933493 |
| 50 | 0 | 2.01538 | | 0.304357 | -0.09038 | 0.812117 | |
| 95 | 0 | 89.6911 | | 1.952749 | 0.935376 | 8.617396 | |

| Size determination | | Dag 84 | 31/08/2010 | | | | |
|--------------------|-----------------------|-----------|------------|----------|----------|----------|----------|
| Depth | Name | Statistic | #Cells | LogY | LogX | Regte X | Span |
| | 5° C A Liposomes | | 10000 | | | | |
| 5 | 0 | 1.06818 | | 0.028644 | -0.26195 | 0.547077 | 16.62817 |
| 50 | 0 | 1.32679 | | 0.122802 | -0.20336 | 0.626096 | |
| 95 | 0 | 131.9601 | | 2.120443 | 1.039728 | 10.95791 | |
| | 5° C A Liposomes | | 100000 | | | | |
| 5 | 0 | 1.08921 | | 0.037112 | -0.25668 | 0.553755 | 21.28378 |
| 50 | 0 | 1.94907 | | 0.289827 | -0.09942 | 0.795384 | |
| 95 | 0 | 279.554 | | 2.446466 | 1.242605 | 17.48255 | |
| | 5° C C Liposomes | | 100000 | | | | |
| 5 | 0 | 1.09168 | | 0.038095 | -0.25607 | 0.554536 | 19.44483 |
| 50 | 0 | 2.27489 | | 0.35696 | -0.05765 | 0.875694 | |
| 95 | 0 | 282.1207 | | 2.450435 | 1.245075 | 17.58226 | |
| | 5° C B AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.14619 | | 0.059257 | -0.2429 | 0.571608 | 15.4338 |
| 50 | 0 | 2.90648 | | 0.463367 | 0.008567 | 1.019922 | |
| 95 | 0 | 250.1135 | | 2.398137 | 1.212531 | 16.31289 | |
| | 5° C B AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.1476 | | 0.059791 | -0.24257 | 0.572045 | 15.17805 |
| 50 | 0 | 3.11396 | | 0.493313 | 0.027202 | 1.064637 | |
| 95 | 0 | 260.4992 | | 2.415806 | 1.223526 | 16.73116 | |
| | 5° C C AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.16306 | | 0.065602 | -0.23895 | 0.576829 | 14.53478 |
| 50 | 0 | 3.37387 | | 0.528128 | 0.048866 | 1.119094 | |
| 95 | 0 | 263.2934 | | 2.42044 | 1.226409 | 16.84261 | |
| | 25° C A Liposomes | | 100000 | | | | |
| 5 | 0 | 1.15519 | | 0.062653 | -0.24079 | 0.574397 | 14.75515 |
| 50 | 0 | 2.84221 | | 0.453656 | 0.002524 | 1.005829 | |
| 95 | 0 | 228.3759 | | 2.35865 | 1.187959 | 15.41555 | |
| | 25° C B Liposomes | | 100000 | | | | |
| 5 | 0 | 1.17265 | | 0.069168 | -0.23673 | 0.579784 | 13.30279 |
| 50 | 0 | 3.40158 | | 0.531681 | 0.051077 | 1.124804 | |
| 95 | 0 | 231.4134 | | 2.364388 | 1.19153 | 15.54282 | |
| | 25° C C Liposomes | | 100000 | | | | |
| 5 | 0 | 1.16923 | | 0.0679 | -0.23752 | 0.578731 | 14.32123 |
| 50 | 0 | 3.22542 | | 0.508586 | 0.036706 | 1.088193 | |
| 95 | 0 | 246.4306 | | 2.391695 | 1.208522 | 16.16299 | |
| | 25° C A | | 100000 | | | | |

| | | | | | | | |
|----|---------------------|----------|--------|----------|----------|----------|----------|
| | AQLiposomes | | | | | | |
| 5 | 0 | 1.11349 | | 0.046686 | -0.25072 | 0.561404 | 2.147319 |
| 50 | 0 | 2.0982 | | 0.321847 | -0.0795 | 0.832726 | |
| 95 | 0 | 11.11136 | | 1.045767 | 0.370981 | 2.349533 | |
| | 25° C B AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.14412 | | 0.058472 | -0.24339 | 0.570965 | 3.988857 |
| 50 | 0 | 3.28254 | | 0.51621 | 0.04145 | 1.100145 | |
| 95 | 0 | 36.90954 | | 1.567139 | 0.695419 | 4.959286 | |
| | 25° C C AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.10801 | | 0.044544 | -0.25206 | 0.559684 | 2.260802 |
| 50 | 0 | 2.02044 | | 0.305446 | -0.0897 | 0.813385 | |
| 95 | 0 | 11.48651 | | 1.060188 | 0.379955 | 2.398586 | |
| | 40° C A Liposomes | | 100000 | | | | |
| 5 | 0 | 1.27717 | | 0.106249 | -0.21366 | 0.611421 | 4.127202 |
| 50 | 0 | 21.10493 | | 1.324384 | 0.544358 | 3.502341 | |
| 95 | 0 | 220.1183 | | 2.342656 | 1.178006 | 15.06629 | |
| | 40° C B Liposomes | | 100000 | | | | |
| 5 | 0 | 1.23499 | | 0.091663 | -0.22274 | 0.598776 | 5.275032 |
| 50 | 0 | 14.26319 | | 1.154217 | 0.438467 | 2.744525 | |
| 95 | 0 | 220.3518 | | 2.343117 | 1.178293 | 15.07623 | |
| | 40° C C Liposomes | | 100000 | | | | |
| 5 | 0 | 1.22111 | | 0.086755 | -0.22579 | 0.594579 | 7.380509 |
| 50 | 0 | 6.15721 | | 0.789384 | 0.21144 | 1.627196 | |
| 95 | 0 | 165.2431 | | 2.218123 | 1.100512 | 12.60412 | |
| | 40° C A AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.10959 | | 0.045163 | -0.25167 | 0.56018 | 5.792823 |
| 50 | 0 | 2.11929 | | 0.32619 | -0.0768 | 0.837925 | |
| 95 | 0 | 42.49917 | | 1.62838 | 0.733529 | 5.414129 | |
| | 40° C B AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.10984 | | 0.04526 | -0.25161 | 0.560259 | 7.305627 |
| 50 | 0 | 2.35844 | | 0.372625 | -0.0479 | 0.895571 | |
| 95 | 0 | 65.74516 | | 1.817864 | 0.85144 | 7.102967 | |
| | 40° C C AQLiposomes | | 100000 | | | | |
| 5 | 0 | 1.11308 | | 0.046526 | -0.25082 | 0.561276 | 7.498212 |
| 50 | 0 | 2.78182 | | 0.444329 | -0.00328 | 0.992476 | |
| 95 | 0 | 79.6404 | | 1.901133 | 0.903257 | 8.003071 | |

Size determination data after processing and summarized:

Mean Size Liposomes (no entrapped drug) (p-values in terms of day 1)

| Day | 5□C | | | Mean | SEM | N | p value |
|-----|----------|----------|----------|----------|----------|---|----------|
| 1 | 0.739516 | 0.754419 | 0.838235 | 0.77739 | 0.030725 | 3 | |
| 7 | 0.66352 | 0.749003 | 0.709707 | 0.70741 | 0.024703 | 3 | 1.000000 |
| 14 | 0.648968 | 0.618042 | 0.79477 | 0.68726 | 0.054491 | 3 | 1.000000 |
| 21 | 0.650364 | 0.725684 | 0.872111 | 0.749386 | 0.065101 | 3 | 1.000000 |
| 28 | 0.667524 | 0.770606 | 0.652399 | 0.696843 | 0.037139 | 3 | 1.000000 |
| 42 | 0.657103 | 0.875891 | 0.864756 | 0.79925 | 0.071146 | 3 | 1.000000 |

| | | | | | | | |
|----|----------|----------|----------|----------|----------|---|----------|
| 70 | 0.693514 | 0.737394 | 0.906676 | 0.779194 | 0.064987 | 3 | 1.000000 |
| 84 | 0.626096 | 0.795385 | 0.875694 | 0.765725 | 0.073563 | 3 | 1.000000 |

| Day | 25°C | | | Mean | SEM | N | p value |
|-----|----------|----------|----------|----------|----------|---|----------|
| 1 | 0.868519 | 0.91919 | 0.822692 | 0.870134 | 0.027868 | 3 | |
| 7 | 0.707871 | 0.722638 | 0.818928 | 0.749812 | 0.03482 | 3 | 1.000000 |
| 14 | 0.780932 | 0.704251 | 0.669699 | 0.718294 | 0.032869 | 3 | 1.000000 |
| 21 | 0.86402 | 0.862476 | 0.799026 | 0.84184 | 0.021412 | 3 | 1.000000 |
| 28 | 0.802764 | 0.756463 | 0.774764 | 0.777997 | 0.013463 | 3 | 1.000000 |
| 42 | 0.959076 | 0.938902 | 0.857263 | 0.918414 | 0.031125 | 3 | 1.000000 |
| 70 | 0.782646 | 0.913544 | 0.743504 | 0.813231 | 0.051413 | 3 | 1.000000 |
| 84 | 1.005829 | 1.124804 | 1.088193 | 1.072942 | 0.035182 | 3 | 1.000000 |

| Day | 40°C | | | Mean | SEM | N | p value |
|-----|----------|----------|----------|----------|----------|---|-----------------|
| 1 | 0.693704 | 0.748771 | 0.748215 | 0.73023 | 0.018264 | 3 | |
| 7 | 0.659479 | 0.689514 | 0.685316 | 0.678103 | 0.009391 | 3 | 1.000000 |
| 14 | 0.82355 | 0.726545 | 0.664662 | 0.738252 | 0.046239 | 3 | 1.000000 |
| 21 | 0.823632 | 0.823945 | 0.803072 | 0.816883 | 0.006906 | 3 | 1.000000 |
| 28 | 0.643718 | 0.840046 | 0.750287 | 0.744684 | 0.056744 | 3 | 1.000000 |
| 42 | 0.872886 | 0.772983 | 0.879357 | 0.841742 | 0.03443 | 3 | 1.000000 |
| 70 | 1.005267 | 1.04133 | 1.561986 | 1.202861 | 0.179864 | 3 | 0.006998 |
| 84 | 2.502341 | 2.744524 | 1.627196 | 2.291354 | 0.339358 | 3 | 0.000000 |

Mean Size Liposomes with entrapped AQ

| Day | 5°C | | | Mean | SEM | N | p value |
|-----|----------|----------|----------|----------|----------|---|----------|
| 1 | 0.757007 | 0.821443 | 0.863131 | 0.81386 | 0.030869 | 3 | |
| 7 | 0.765893 | 0.697899 | 0.792252 | 0.752015 | 0.028108 | 3 | 1.000000 |
| 14 | 0.918792 | 0.950689 | 0.924178 | 0.93122 | 0.009858 | 3 | 1.000000 |
| 21 | 1.0288 | 0.892188 | 0.89954 | 0.940176 | 0.044363 | 3 | 1.000000 |
| 28 | 0.877174 | 0.90551 | 0.882612 | 0.888432 | 0.008682 | 3 | 1.000000 |
| 42 | 0.819404 | 1.058256 | 0.885958 | 0.921206 | 0.071167 | 3 | 1.000000 |
| 70 | 0.961631 | 0.909249 | 0.929274 | 0.933384 | 0.01526 | 3 | 1.000000 |
| 84 | 1.019922 | 1.064637 | 1.119094 | 1.067884 | 0.028674 | 3 | 1.000000 |

| Day | 25°C | | | Mean | SEM | N | p value |
|-----|----------|----------|----------|----------|----------|---|----------|
| 1 | 0.821256 | 0.738215 | 0.869364 | 0.809611 | 0.038304 | 3 | |
| 7 | 0.856416 | 0.821161 | 0.791371 | 0.822983 | 0.018799 | 3 | 1.000000 |
| 14 | 0.860853 | 0.87457 | 0.93559 | 0.890338 | 0.02297 | 3 | 1.000000 |
| 21 | 0.941992 | 0.893005 | 1.146284 | 0.99376 | 0.077562 | 3 | 1.000000 |
| 28 | 1.046014 | 0.849084 | 1.013644 | 0.969581 | 0.060969 | 3 | 1.000000 |
| 42 | 0.996669 | 0.965947 | 1.015672 | 0.992763 | 0.014487 | 3 | 1.000000 |
| 70 | 0.781291 | 0.898866 | 0.791516 | 0.823891 | 0.037604 | 3 | 1.000000 |
| 84 | 0.832726 | 1.100145 | 0.813385 | 0.915419 | 0.092532 | 3 | 1.000000 |

| Day | 40°C | | | Mean | SEM | N | p value |
|-----|----------|----------|----------|----------|----------|---|----------|
| 1 | 0.864481 | 0.938757 | 0.744583 | 0.849274 | 0.056567 | 3 | |
| 7 | 0.665559 | 0.673782 | 0.806259 | 0.7152 | 0.045591 | 3 | 1.000000 |
| 14 | 0.748539 | 0.874069 | 0.759807 | 0.794138 | 0.040098 | 3 | 1.000000 |
| 21 | 0.836189 | 0.890378 | 1.05002 | 0.925529 | 0.064181 | 3 | 1.000000 |
| 28 | 0.738417 | 0.704907 | 0.772587 | 0.738637 | 0.019538 | 3 | 1.000000 |
| 42 | 0.816423 | 0.791448 | 0.782961 | 0.796944 | 0.010043 | 3 | 1.000000 |
| 70 | 0.864536 | 0.851111 | 0.812117 | 0.842588 | 0.015721 | 3 | 1.000000 |
| 84 | 0.837925 | 0.895571 | 0.992476 | 0.908657 | 0.045092 | 3 | 1.000000 |

Span Liposomes (no entrapped drug)

| Day | 5°C | | | Mean | SEM | N | p value |
|-----|----------|----------|----------|----------|----------|---|-----------------|
| 1 | 18.47679 | 19.5112 | 19.17589 | 19.05463 | 0.3047 | 3 | |
| 7 | 10.19214 | 20.67617 | 19.74557 | 16.87129 | 3.350365 | 3 | 1.000000 |
| 14 | 19.75836 | 11.33937 | 20.25588 | 17.11787 | 2.892818 | 3 | 1.000000 |
| 21 | 17.35238 | 19.37945 | 18.14915 | 18.29366 | 0.589608 | 3 | 1.000000 |
| 28 | 23.9163 | 21.62521 | 23.71221 | 23.08457 | 0.732056 | 3 | 0.021872 |
| 42 | 23.41984 | 19.72904 | 20.07182 | 21.07356 | 1.177301 | 3 | 1.000000 |
| 70 | 26.0546 | 24.65788 | 20.57549 | 23.76266 | 1.6438 | 3 | 0.003839 |
| 84 | 16.62817 | 21.28378 | 19.44483 | 19.11893 | 1.353801 | 3 | 1.000000 |

| Day | 25°C | | | Mean | SEM | N | p value |
|-----|----------|----------|----------|----------|----------|---|----------|
| 1 | 19.57776 | 18.59025 | 19.57151 | 19.24651 | 0.328134 | 3 | |
| 7 | 21.2092 | 21.61216 | 20.55124 | 21.1242 | 0.309196 | 3 | 1.000000 |
| 14 | 19.36374 | 18.44548 | 16.79248 | 18.20057 | 0.752293 | 3 | 1.000000 |
| 21 | 16.88696 | 17.13535 | 18.85024 | 17.62418 | 0.617208 | 3 | 1.000000 |
| 28 | 18.32789 | 18.24798 | 19.27634 | 18.6174 | 0.330275 | 3 | 1.000000 |
| 42 | 14.9429 | 15.70374 | 17.35799 | 16.00154 | 0.7129 | 3 | 1.000000 |
| 70 | 19.30536 | 17.60756 | 19.34851 | 18.75381 | 0.573261 | 3 | 1.000000 |
| 84 | 14.75515 | 13.30279 | 14.32123 | 14.12639 | 0.43043 | 3 | 1.000000 |

| Day | □□□C | | | Mean | SEM | N | p value |
|-----|----------|----------|----------|----------|----------|---|-----------------|
| 1 | 18.09222 | 20.71074 | 20.8767 | 19.89322 | 0.901773 | 3 | |
| 7 | 20.53185 | 21.91706 | 21.84482 | 21.43124 | 0.45018 | 3 | 1.000000 |
| 14 | 19.24837 | 20.69654 | 19.33864 | 19.76118 | 0.468404 | 3 | 1.000000 |
| 21 | 19.12012 | 19.30585 | 19.2897 | 19.23856 | 0.059402 | 3 | 1.000000 |
| 28 | 23.23245 | 20.37926 | 21.82366 | 21.81179 | 0.823667 | 3 | 1.000000 |
| 42 | 19.54854 | 21.80746 | 19.75242 | 20.36947 | 0.721398 | 3 | 1.000000 |
| 70 | 16.324 | 15.41642 | 10.46228 | 14.06757 | 1.821583 | 3 | 0.335261 |
| 84 | 4.127203 | 5.275033 | 7.380509 | 5.594248 | 0.952615 | 3 | 0.000000 |

Span Liposomes with entrapped AQ

| Day | 5°C | | | Mean | SEM | N | p value |
|-----|----------|----------|----------|----------|----------|---|----------|
| 1 | 20.68291 | 20.09281 | 19.63081 | 20.13551 | 0.304463 | 3 | |
| 7 | 21.60012 | 22.0065 | 21.75437 | 21.78699 | 0.118442 | 3 | 1.000000 |
| 14 | 17.8364 | 15.13115 | 14.87745 | 15.94833 | 0.946871 | 3 | 1.000000 |
| 21 | 14.45646 | 15.2448 | 15.44521 | 15.04882 | 0.30178 | 3 | 1.000000 |
| 28 | 17.63926 | 17.36643 | 17.32262 | 17.44277 | 0.099057 | 3 | 1.000000 |
| 42 | 17.64305 | 15.346 | 17.31351 | 16.76752 | 0.717098 | 3 | 1.000000 |
| 70 | 17.56733 | 18.25054 | 17.68894 | 17.8356 | 0.210418 | 3 | 1.000000 |
| 84 | 15.4338 | 15.17805 | 14.53478 | 15.04888 | 0.267442 | 3 | 1.000000 |

| Day | 25°C | | | Mean | SEM | N | p value |
|-----|----------|----------|----------|----------|----------|---|-----------------|
| 1 | 20.40421 | 20.13788 | 19.45363 | 19.99857 | 0.283111 | 3 | |
| 7 | 15.35992 | 15.56098 | 14.97836 | 15.29975 | 0.170857 | 3 | 1.000000 |
| 14 | 14.13428 | 14.47732 | 14.84319 | 14.48493 | 0.20468 | 3 | 0.666482 |
| 21 | 14.17276 | 14.31596 | 12.70445 | 13.73106 | 0.514965 | 3 | 0.121673 |
| 28 | 14.22973 | 16.87125 | 13.46399 | 14.85499 | 1.03208 | 3 | 1.000000 |
| 42 | 8.933321 | 14.25665 | 8.785254 | 10.65841 | 1.799628 | 3 | 0.000036 |
| 70 | 3.160192 | 6.878675 | 3.337836 | 4.458901 | 1.210973 | 3 | 0.000000 |
| 84 | 2.147319 | 3.988857 | 2.260802 | 2.798993 | 0.595833 | 3 | 0.000000 |

| Day | □□□C | | | Mean | SEM | N | p value |
|-----|----------|----------|----------|----------|----------|---|-----------------|
| 1 | 16.91162 | 15.93867 | 18.50859 | 17.11963 | 0.749127 | 3 | |
| 7 | 19.23488 | 15.78252 | 17.38563 | 17.46768 | 0.997455 | 3 | 1.000000 |
| 14 | 16.99033 | 14.82739 | 16.51653 | 16.11142 | 0.656421 | 3 | 1.000000 |
| 21 | 13.81955 | 15.65404 | 13.58407 | 14.35255 | 0.654284 | 3 | 1.000000 |
| 28 | 18.81178 | 20.15615 | 18.56705 | 19.17833 | 0.49399 | 3 | 1.000000 |
| 42 | 18.09569 | 16.41876 | 18.47233 | 17.66226 | 0.631185 | 3 | 1.000000 |
| 70 | 11.51468 | 11.67776 | 9.933493 | 11.04198 | 0.556238 | 3 | 0.189148 |
| 84 | 5.792822 | 7.305627 | 7.498212 | 6.865553 | 0.539239 | 3 | 0.000002 |

Annexure D: pH determination data for accelerated stability study

Liposomes with no entrapped drug (p-values in terms of day 1)

| Day | 5°C | | | Mean | SEM | N | p value |
|-----|------|------|------|----------|----------|---|----------|
| 1 | 5.98 | 6.01 | 6.03 | 6.006667 | 0.01453 | 3 | |
| 7 | 5.12 | 6.09 | 6.07 | 5.76 | 0.320052 | 3 | 0.398399 |
| 14 | 6.01 | 6 | 6.08 | 6.03 | 0.025166 | 3 | 1.000000 |
| 21 | 5.98 | 5.92 | 5.97 | 5.956666 | 0.018559 | 3 | 1.000000 |
| 28 | 5.98 | 6.02 | 5.97 | 5.99 | 0.015275 | 3 | 1.000000 |
| 42 | 6.04 | 6.07 | 6.04 | 6.05 | 0.01 | 3 | 1.000000 |
| 56 | 6 | 5.99 | 5.96 | 5.983333 | 0.012018 | 3 | 1.000000 |
| 70 | 6.02 | 6.02 | 6.02 | 6.02 | 0 | 3 | 1.000000 |
| 84 | 5.94 | 5.86 | 5.88 | 5.893333 | 0.024037 | 3 | 1.000000 |

| Day | 25°C | | | Mean | SEM | N | p value |
|-----|------|------|------|----------|----------|---|----------|
| 1 | 5.83 | 5.85 | 5.86 | 5.846667 | 0.008819 | 3 | |
| 7 | 5.93 | 6 | 5.96 | 5.963333 | 0.020276 | 3 | 1.000000 |
| 14 | 5.84 | 5.84 | 5.91 | 5.863333 | 0.023333 | 3 | 1.000000 |
| 21 | 5.98 | 5.99 | 5.96 | 5.976666 | 0.008819 | 3 | 1.000000 |
| 28 | 5.86 | 5.88 | 5.93 | 5.89 | 0.020817 | 3 | 1.000000 |
| 42 | 5.91 | 5.93 | 5.89 | 5.91 | 0.011547 | 3 | 1.000000 |
| 56 | 5.86 | 5.87 | 5.83 | 5.853333 | 0.012019 | 3 | 1.000000 |
| 70 | 5.87 | 5.86 | 5.88 | 5.87 | 0.005773 | 3 | 1.000000 |
| 84 | 5.83 | 5.85 | 5.88 | 5.853333 | 0.01453 | 3 | 1.000000 |

| Day | □□□C | | | Mean | SEM | N | p value |
|-----|------|------|------|----------|----------|---|----------|
| 1 | 5.87 | 5.89 | 5.89 | 5.883333 | 0.006667 | 3 | |
| 7 | 5.93 | 6.04 | 6.03 | 6 | 0.035119 | 3 | 1.000000 |
| 14 | 5.85 | 5.86 | 5.95 | 5.886667 | 0.031798 | 3 | 1.000000 |
| 21 | 5.94 | 5.96 | 6.01 | 5.97 | 0.020817 | 3 | 1.000000 |
| 28 | 5.9 | 5.85 | 5.88 | 5.876667 | 0.01453 | 3 | 1.000000 |
| 42 | 5.96 | 5.93 | 6 | 5.963333 | 0.020276 | 3 | 1.000000 |
| 56 | 5.92 | 5.92 | 5.94 | 5.926667 | 0.006667 | 3 | 1.000000 |
| 70 | 5.82 | 5.84 | 5.87 | 5.843333 | 0.01453 | 3 | 1.000000 |
| 84 | 5.91 | 5.9 | 5.92 | 5.91 | 0.005773 | 3 | 1.000000 |

Liposomes with entrapped AQ

| Day | 5°C | | | Mean | SEM | N | p value |
|-----|------|------|------|----------|----------|---|----------|
| 1 | 5.95 | 5.91 | 5.95 | 5.936666 | 0.013333 | 3 | |
| 7 | 6.12 | 6.13 | 6.14 | 6.13 | 0.005773 | 3 | 1.000000 |
| 14 | 5.99 | 6.02 | 5.99 | 6 | 0.01 | 3 | 1.000000 |
| 21 | 6.03 | 6 | 6.03 | 6.02 | 0.01 | 3 | 1.000000 |
| 28 | 5.97 | 5.96 | 5.95 | 5.96 | 0.005773 | 3 | 1.000000 |
| 42 | 6.01 | 6.01 | 6 | 6.006667 | 0.003333 | 3 | 1.000000 |
| 56 | 5.96 | 6 | 6.01 | 5.99 | 0.015275 | 3 | 1.000000 |
| 70 | 6.03 | 6.1 | 6.07 | 6.066667 | 0.020276 | 3 | 1.000000 |
| 84 | 5.91 | 5.88 | 5.91 | 5.9 | 0.01 | 3 | 1.000000 |

| Day | 25°C | | | Mean | SEM | N | p value |
|-----|------|------|------|----------|----------|---|----------|
| 1 | 5.87 | 5.9 | 5.82 | 5.863333 | 0.023333 | 3 | |
| 7 | 6.05 | 6.09 | 6.09 | 6.076667 | 0.013333 | 3 | 1.000000 |
| 14 | 5.94 | 5.88 | 5.9 | 5.906667 | 0.017638 | 3 | 1.000000 |
| 21 | 6.02 | 5.98 | 5.97 | 5.99 | 0.015275 | 3 | 1.000000 |
| 28 | 5.99 | 6.01 | 5.95 | 5.983333 | 0.017638 | 3 | 1.000000 |
| 42 | 5.86 | 5.9 | 5.86 | 5.873333 | 0.013333 | 3 | 1.000000 |
| 56 | 5.81 | 5.82 | 5.82 | 5.816667 | 0.003333 | 3 | 1.000000 |
| 70 | 5.85 | 5.82 | 5.82 | 5.83 | 0.01 | 3 | 1.000000 |
| 84 | 5.88 | 5.79 | 5.88 | 5.85 | 0.03 | 3 | 1.000000 |

| Day | 37°C | | | Mean | SEM | N | p value |
|-----|------|------|------|----------|----------|---|----------|
| 1 | 5.9 | 5.92 | 5.9 | 5.906667 | 0.006667 | 3 | |
| 7 | 6.01 | 6.01 | 6.02 | 6.013333 | 0.003333 | 3 | 1.000000 |
| 14 | 6 | 5.98 | 6 | 5.993333 | 0.006667 | 3 | 1.000000 |
| 21 | 5.89 | 5.95 | 5.96 | 5.933333 | 0.021858 | 3 | 1.000000 |
| 28 | 5.9 | 5.91 | 5.89 | 5.9 | 0.005773 | 3 | 1.000000 |
| 42 | 5.9 | 5.9 | 5.88 | 5.893333 | 0.006667 | 3 | 1.000000 |
| 56 | 5.84 | 5.88 | 5.91 | 5.876667 | 0.020276 | 3 | 1.000000 |
| 70 | 5.94 | 5.9 | 5.9 | 5.913333 | 0.013333 | 3 | 1.000000 |
| 84 | 5.99 | 5.93 | 5.97 | 5.963333 | 0.017638 | 3 | 1.000000 |

Annexure E: Entrapment efficacy data for accelerated stability study

Raw data:

| | Day 1 | | | Day 7 | | | Day 14 | | |
|--------|-----------|--------------|--------------|-----------|--------------|--------------|-----------|--------------|--------------|
| | UV Lesing | Conc. | % EE | UV Lesing | Conc. | % EE | UV Lesing | Conc. | % EE |
| 5°C A | 0.101 | 2.96918 8 | 25.7703 1 | 0.028 | 0.92437 | 76.8907 6 | 0.019 | 0.67226 9 | 93.2773 1 |
| 5°C B | 0.099 | 2.91316 5 | 27.1708 7 | 0.024 | 0.81232 5 | 79.6918 8 | 0.016 | 0.58823 5 | 94.1176 5 |
| 5°C C | 0.089 | 2.63305 3 | 34.1736 7 | 0.028 | 0.92437 | 76.8907 6 | 0.014 | 0.53221 3 | 94.6778 7 |
| 25°C A | 0.056 | 1.70868 3 | 57.2829 1 | 0.011 | 0.44817 9 | 88.7955 2 | 0.011 | 0.44817 9 | 95.5182 1 |
| 25°C B | 0.06 | 1.82072 8 | 54.4817 9 | 0.012 | 0.47619 | 88.0952 4 | 0.013 | 0.50420 2 | 94.9579 8 |
| 25°C C | 0.064 | 1.93277 3 | 51.6806 7 | 0.011 | 0.44817 9 | 88.7955 2 | 0.011 | 0.44817 9 | 95.5182 1 |
| 40°C A | 0.065 | 1.96078 4 | 50.9803 9 | 0.006 | 0.30812 3 | 92.2969 2 | 0.023 | 0.78431 4 | 92.1568 6 |
| 40°C B | 0.059 | 1.79271 7 | 55.1820 7 | 0.007 | 0.33613 4 | 91.5966 4 | 0.027 | 0.89635 9 | 91.0364 1 |
| 40°C C | 0.067 | 2.01680 7 | 49.5798 3 | 0.006 | 0.30812 3 | 92.2969 2 | 0.026 | 0.86834 7 | 91.3165 3 |
| | Day 21 | | | Day 28 | | | Day 42 | | |
| | UV Lesing | Conc. | % EE | UV Lesing | Conc. | % EE | UV Lesing | Conc. | % EE |
| 5°C A | 0.116 | 3.38935 6 | 96.6106 4 | 0.106 | 3.10924 4 | 96.8907 6 | 0.107 | 3.13725 5 | 96.8627 5 |
| 5°C B | 0.162 | 4.67787 1 | 95.3221 3 | 0.09 | 2.66106 4 | 97.3389 4 | 0.092 | 2.71708 7 | 97.2829 1 |
| 5°C C | 0.136 | 3.94958 | 96.0504 2 | 0.088 | 2.60504 2 | 97.3949 6 | 0.092 | 2.71708 7 | 97.2829 1 |
| 25°C A | 0.167 | 4.81792 7 | 95.1820 7 | 0.13 | 3.78151 3 | 96.2184 9 | 0.104 | 3.05322 1 | 96.9467 8 |
| 25°C B | 0.171 | 4.92997 2 | 95.0700 3 | 0.126 | 3.66946 8 | 96.3305 3 | 0.101 | 2.96918 8 | 97.0308 1 |
| 25°C C | 0.18 | 5.18207 3 | 94.8179 3 | 0.122 | 3.55742 3 | 96.4425 8 | 0.101 | 2.96918 8 | 97.0308 1 |
| 40°C A | 0.277 | 7.89916 | 92.1008 4 | 0.232 | 6.63865 5 | 93.3613 4 | 0.217 | 6.21848 7 | 93.7815 1 |
| 40°C B | 0.238 | 6.80672 3 | 93.1932 8 | 0.235 | 6.72268 9 | 93.2773 1 | 0.217 | 6.21848 7 | 93.7815 1 |
| 40°C C | 0.256 | 7.31092 | 92.6890 | 0.233 | 6.66666 | 93.3333 | 0.217 | 6.21848 | 93.7815 |

| | | | | | | | | | |
|--------|-----------|--------------|--------------|-----------|--------------|--------------|-----------|--------------|--------------|
| | | 4 | 8 | | 7 | 3 | | 7 | 1 |
| | Day 56 | | | Day 70 | | | Day 84 | | |
| | UV Lesing | Conc. | % EE | UV Lesing | Conc. | % EE | UV Lesing | Conc. | % EE |
| 5°C A | 0.088 | 2.60504 2 | 97.3949 6 | 0.179 | 5.15406 2 | 97.4229 7 | 0.192 | 5.51820 7 | 97.2409 |
| 5°C B | 0.077 | 2.29691 9 | 97.7030 8 | 0.172 | 4.95798 3 | 97.5210 1 | 0.191 | 5.49019 6 | 97.2549 |
| 5°C C | 0.067 | 2.01680 7 | 97.9831 9 | 0.184 | 5.29411 8 | 97.3529 4 | 0.184 | 5.29411 8 | 97.3529 4 |
| 25°C A | 0.084 | 2.49299 7 | 97.507 | 0.347 | 9.85994 4 | 95.0700 3 | 0.208 | 5.96638 7 | 97.0168 1 |
| 25°C B | 0.091 | 2.68907 6 | 97.3109 2 | 0.333 | 9.46778 7 | 95.2661 1 | 0.198 | 5.68627 5 | 97.1568 6 |
| 25°C C | 0.089 | 2.63305 3 | 97.3669 5 | 0.351 | 9.97198 9 | 95.0140 1 | 0.281 | 8.01120 4 | 95.9944 |
| 40°C A | 0.179 | 5.15406 2 | 94.8459 4 | 0.348 | 9.88795 5 | 95.0560 2 | 0.313 | 8.90756 3 | 95.5462 2 |
| 40°C B | 0.187 | 5.37815 1 | 94.6218 5 | 0.326 | 9.27170 9 | 95.3641 5 | 0.315 | 8.96358 5 | 95.5182 1 |
| 40°C C | 0.184 | 5.29411 8 | 94.7058 8 | 0.336 | 9.55182 1 | 95.2240 9 | 0.337 | 9.57983 2 | 95.2100 8 |

Entrapment data summary (p-values in terms of day 1)

| Day | 5°C | | | Mean | SEM | N | p value |
|-----|----------|----------|----------|----------|----------|---|-----------------|
| 1 | 25.77031 | 27.17087 | 34.17367 | 29.03828 | 2.599329 | 3 | |
| 7 | 76.89075 | 79.69188 | 76.89075 | 77.82446 | 0.933708 | 3 | 0.000000 |
| 14 | 93.27731 | 94.11765 | 94.67787 | 94.02428 | 0.406993 | 3 | 0.000000 |
| 21 | 96.61064 | 95.32213 | 96.05042 | 95.9944 | 0.373015 | 3 | 0.000000 |
| 28 | 96.89075 | 97.33894 | 97.39496 | 97.20821 | 0.159553 | 3 | 0.000000 |
| 42 | 96.86275 | 97.28291 | 97.28291 | 97.14286 | 0.140055 | 3 | 0.000000 |
| 56 | 97.39496 | 97.70308 | 97.98319 | 97.69374 | 0.169873 | 3 | 0.000000 |
| 70 | 97.42297 | 97.52101 | 97.35294 | 97.4323 | 0.048741 | 3 | 0.000000 |
| 84 | 97.2409 | 97.25491 | 97.35294 | 97.28291 | 0.035247 | 3 | 0.000000 |

| Day | 25°C | | | Mean | SEM | N | p value |
|-----|----------|----------|----------|----------|----------|---|-----------------|
| 1 | 57.28291 | 54.48179 | 51.68067 | 54.48179 | 1.617227 | 3 | |
| 7 | 88.79552 | 88.09524 | 88.79552 | 88.56209 | 0.233426 | 3 | <i>0.000000</i> |
| 14 | 95.51821 | 94.95798 | 95.51821 | 95.33146 | 0.186742 | 3 | <i>0.000000</i> |
| 21 | 95.18207 | 95.07003 | 94.81793 | 95.02335 | 0.107686 | 3 | <i>0.000000</i> |
| 28 | 96.21849 | 96.33053 | 96.44258 | 96.33054 | 0.064687 | 3 | <i>0.000000</i> |
| 42 | 96.94678 | 97.03081 | 97.03081 | 97.00281 | 0.028015 | 3 | <i>0.000000</i> |
| 56 | 97.507 | 97.31092 | 97.36695 | 97.39496 | 0.058311 | 3 | <i>0.000000</i> |
| 70 | 95.07003 | 95.26611 | 95.01401 | 95.11671 | 0.076429 | 3 | <i>0.000000</i> |
| 84 | 97.01681 | 97.15686 | 95.9944 | 96.72269 | 0.366382 | 3 | <i>0.000000</i> |

| Day | 40°C | | | Mean | SEM | N | p value |
|-----|----------|----------|----------|----------|----------|---|-----------------|
| 1 | 50.98039 | 55.18207 | 49.57983 | 51.9141 | 1.683264 | 3 | |
| 7 | 92.29692 | 91.59664 | 92.29692 | 92.06349 | 0.233426 | 3 | <i>0.000000</i> |
| 14 | 92.15686 | 91.03641 | 91.31653 | 91.50327 | 0.33665 | 3 | <i>0.000000</i> |
| 21 | 92.10084 | 93.19328 | 92.68908 | 92.66106 | 0.315673 | 3 | <i>0.000000</i> |
| 28 | 93.36134 | 93.27731 | 93.33333 | 93.324 | 0.024703 | 3 | <i>0.000000</i> |
| 42 | 93.78151 | 93.78151 | 93.78151 | 93.78151 | 0 | 3 | <i>0.000000</i> |
| 56 | 94.84594 | 94.62185 | 94.70588 | 94.72456 | 0.06536 | 3 | <i>0.000000</i> |
| 70 | 95.05602 | 95.36415 | 95.22409 | 95.21475 | 0.089069 | 3 | <i>0.000000</i> |
| 84 | 95.54622 | 95.51821 | 95.21008 | 95.42484 | 0.10768 | 3 | <i>0.000000</i> |

Annexure F: ROS data

ROS data for uninfected erythrocytes (RBS population)

| Depth | Name | Statistic | #Cells |
|--------------------|---------------------------|-----------|--------|
| Skoon selle | Data.001 | | 100000 |
| > | Stained | 1.357 | 1357 |
| >> | (FL1-H) DCFH : Geom. Mean | 24.64901 | |
| > | Unstained | 97.368 | 97368 |
| >> | (FL1-H) DCFH : Geom. Mean | 3.46278 | |
| Skoon selle | Data.002 | | 100000 |
| > | Stained | 0.974 | 974 |
| >> | (FL1-H) DCFH : Geom. Mean | 24.63948 | |
| > | Unstained | 98.005 | 98005 |
| >> | (FL1-H) DCFH : Geom. Mean | 3.71765 | |
| Negatiewe kontrole | Data.003 | | 100000 |
| > | Stained | 57.127 | 57127 |
| >> | (FL1-H) DCFH : Geom. Mean | 52.02132 | |
| > | Unstained | 41.446 | 41446 |
| >> | (FL1-H) DCFH : Geom. Mean | 2.35967 | |
| Negatiewe kontrole | Data.004 | | 100000 |
| > | Stained | 48.061 | 48061 |
| >> | (FL1-H) DCFH : Geom. Mean | 48.5577 | |
| > | Unstained | 50.331 | 50331 |
| >> | (FL1-H) DCFH : Geom. Mean | 2.39258 | |
| AQ | Data.015 | | 100000 |
| > | Stained | 0.422 | 422 |
| >> | (FL1-H) DCFH : Geom. Mean | 26.70122 | |
| > | Unstained | 99.046 | 99046 |
| >> | (FL1-H) DCFH : Geom. Mean | 4.67183 | |
| AQ | Data.016 | | 100000 |
| > | Stained | 0.789 | 789 |
| >> | (FL1-H) DCFH : Geom. Mean | 28.84175 | |
| > | Unstained | 98.367 | 98367 |
| >> | (FL1-H) DCFH : Geom. Mean | 4.84407 | |
| Buffer | Data.017 | | 100000 |
| > | Stained | 53.199 | 53199 |
| >> | (FL1-H) DCFH : Geom. Mean | 59.22056 | |
| > | Unstained | 45.464 | 45464 |
| >> | (FL1-H) DCFH : Geom. Mean | 2.22451 | |
| Buffer | Data.018 | | 100000 |
| > | Stained | 57.414 | 57414 |
| >> | (FL1-H) DCFH : Geom. Mean | 76.43562 | |
| > | Unstained | 41.577 | 41577 |
| >> | (FL1-H) DCFH : Geom. Mean | 2.13006 | |
| sLipo 100 | Data.019 | | 100000 |
| > | Stained | 51.558 | 51558 |
| >> | (FL1-H) DCFH : Geom. Mean | 105.364 | |
| > | Unstained | 46.614 | 46614 |
| >> | (FL1-H) DCFH : Geom. Mean | 4.49734 | |
| sLipo 100 | Data.020 | | 100000 |
| > | Stained | 49.754 | 49754 |

| | | | |
|-------------|---------------------------|----------|--------|
| > > | (FL1-H) DCFH : Geom. Mean | 108.9536 | |
| > | Unstained | 48.823 | 48823 |
| > > | (FL1-H) DCFH : Geom. Mean | 4.18486 | |
| sLipo 80 | Data.021 | | 100000 |
| > | Stained | 44.349 | 44349 |
| > > | (FL1-H) DCFH : Geom. Mean | 101.432 | |
| > | Unstained | 54.174 | 54174 |
| > > | (FL1-H) DCFH : Geom. Mean | 3.76459 | |
| sLipo 80 | Data.022 | | 100000 |
| > | Stained | 48.653 | 48653 |
| > > | (FL1-H) DCFH : Geom. Mean | 105.3355 | |
| > | Unstained | 49.879 | 49879 |
| > > | (FL1-H) DCFH : Geom. Mean | 4.21907 | |
| sLipo 60 | Data.023 | | 100000 |
| > | Stained | 26.326 | 26326 |
| > > | (FL1-H) DCFH : Geom. Mean | 93.12896 | |
| > | Unstained | 72.496 | 72496 |
| > > | (FL1-H) DCFH : Geom. Mean | 2.65694 | |
| sLipo 60 | Data.024 | | 100000 |
| > | Stained | 15.689 | 15689 |
| > > | (FL1-H) DCFH : Geom. Mean | 86.87699 | |
| > | Unstained | 83.442 | 83442 |
| > > | (FL1-H) DCFH : Geom. Mean | 2.21976 | |
| sLipo 40 | Data.025 | | 100000 |
| > | Stained | 8.746 | 8746 |
| > > | (FL1-H) DCFH : Geom. Mean | 77.474 | |
| > | Unstained | 90.531 | 90531 |
| > > | (FL1-H) DCFH : Geom. Mean | 2.11051 | |
| sLipo 40 | Data.026 | | 100000 |
| > | Stained | 13.297 | 13297 |
| > > | (FL1-H) DCFH : Geom. Mean | 94.48132 | |
| > | Unstained | 85.905 | 85905 |
| > > | (FL1-H) DCFH : Geom. Mean | 2.1631 | |
| sLipo 20 | Data.027 | | 100000 |
| > | Stained | 7.479 | 7479 |
| > > | (FL1-H) DCFH : Geom. Mean | 56.96462 | |
| > | Unstained | 91.32 | 91320 |
| > > | (FL1-H) DCFH : Geom. Mean | 2.42262 | |
| sLipo 20 | Data.028 | | 100000 |
| > | Stained | 9.441 | 9441 |
| > > | (FL1-H) DCFH : Geom. Mean | 52.63757 | |
| > | Unstained | 88.864 | 88864 |
| > > | (FL1-H) DCFH : Geom. Mean | 2.77062 | |
| sLipo 0 | Data.029 | | 100000 |
| > | Stained | 12.357 | 12357 |
| > > | (FL1-H) DCFH : Geom. Mean | 26.39701 | |
| > | Unstained | 82.124 | 82124 |
| > > | (FL1-H) DCFH : Geom. Mean | 5.64183 | |
| sLipo 0 | Data.030 | | 100000 |
| > | Stained | 13.048 | 13048 |
| > > | (FL1-H) DCFH : Geom. Mean | 26.26704 | |
| > | Unstained | 80.925 | 80925 |
| > > | (FL1-H) DCFH : Geom. Mean | 6.24511 | |
| AQ Lipo 100 | Data.031 | | 100000 |

| | | | |
|-------------|---------------------------|----------|--------|
| > | Stained | 20.907 | 20907 |
| >> | (FL1-H) DCFH : Geom. Mean | 101.9043 | |
| > | Unstained | 78.477 | 78477 |
| >> | (FL1-H) DCFH : Geom. Mean | 2.00286 | |
| AQ Lipo 100 | Data.032 | | 100000 |
| > | Stained | 32.798 | 32798 |
| >> | (FL1-H) DCFH : Geom. Mean | 105.0557 | |
| > | Unstained | 66.212 | 66212 |
| >> | (FL1-H) DCFH : Geom. Mean | 2.43341 | |
| AQ Lipo 80 | Data.033 | | 100000 |
| > | Stained | 35.716 | 35716 |
| >> | (FL1-H) DCFH : Geom. Mean | 102.1289 | |
| > | Unstained | 62.877 | 62877 |
| >> | (FL1-H) DCFH : Geom. Mean | 3.00157 | |
| AQ Lipo 80 | Data.034 | | 100000 |
| > | Stained | 41.294 | 41294 |
| >> | (FL1-H) DCFH : Geom. Mean | 110.2118 | |
| > | Unstained | 57.464 | 57464 |
| >> | (FL1-H) DCFH : Geom. Mean | 3.19901 | |
| AQ Lipo 60 | Data.035 | | 100000 |
| > | Stained | 48.704 | 48704 |
| >> | (FL1-H) DCFH : Geom. Mean | 110.8864 | |
| > | Unstained | 49.907 | 49907 |
| >> | (FL1-H) DCFH : Geom. Mean | 3.59805 | |
| AQ Lipo 60 | Data.036 | | 100000 |
| > | Stained | 40.47 | 40470 |
| >> | (FL1-H) DCFH : Geom. Mean | 110.1774 | |
| > | Unstained | 58.414 | 58414 |
| >> | (FL1-H) DCFH : Geom. Mean | 2.79994 | |
| AQ Lipo 40 | Data.037 | | 100000 |
| > | Stained | 51.373 | 51373 |
| >> | (FL1-H) DCFH : Geom. Mean | 114.2475 | |
| > | Unstained | 47.139 | 47139 |
| >> | (FL1-H) DCFH : Geom. Mean | 3.83064 | |
| AQ Lipo 40 | Data.038 | | 100000 |
| > | Stained | 38.112 | 38112 |
| >> | (FL1-H) DCFH : Geom. Mean | 104.8779 | |
| > | Unstained | 60.638 | 60638 |
| >> | (FL1-H) DCFH : Geom. Mean | 2.58742 | |
| AQ Lipo 20 | Data.039 | | 100000 |
| > | Stained | 50.883 | 50883 |
| >> | (FL1-H) DCFH : Geom. Mean | 106.0623 | |
| > | Unstained | 47.794 | 47794 |
| >> | (FL1-H) DCFH : Geom. Mean | 3.85608 | |
| AQ Lipo 20 | Data.040 | | 100000 |
| > | Stained | 53.271 | 53271 |
| >> | (FL1-H) DCFH : Geom. Mean | 101.5916 | |
| > | Unstained | 44.771 | 44771 |
| >> | (FL1-H) DCFH : Geom. Mean | 4.08636 | |
| AQ Lipo 0 | Data.041 | | 100000 |
| > | Stained | 49.508 | 49508 |
| >> | (FL1-H) DCFH : Geom. Mean | 102.1631 | |
| > | Unstained | 48.678 | 48678 |
| >> | (FL1-H) DCFH : Geom. Mean | 3.89451 | |

| | | | |
|-----------|---------------------------|----------|--------|
| AQ Lipo 0 | Data.042 | | 100000 |
| > | Stained | 50.406 | 50406 |
| > > | (FL1-H) DCFH : Geom. Mean | 105.7871 | |
| > | Unstained | 47.76 | 47760 |
| > > | (FL1-H) DCFH : Geom. Mean | 3.87391 | |

ROS data for *P. falciparum* infected erythrocytes (iRBS populations)

| Depth | Name | Statistic | #Cells |
|--------------------|---------------------------|-----------|--------|
| Skoon selle | Data.008 | | 100000 |
| > | Stained | 1.645 | 1645 |
| > > | (FL1-H) DCFH : Geom. Mean | 29.76891 | |
| > | Unstained | 98.175 | 98175 |
| > > | (FL1-H) DCFH : Geom. Mean | 5.54414 | |
| Skoon selle | Data.010 | | 100000 |
| > | Stained | 1.514 | 1514 |
| > > | (FL1-H) DCFH : Geom. Mean | 31.10775 | |
| > | Unstained | 98.331 | 98331 |
| > > | (FL1-H) DCFH : Geom. Mean | 4.54081 | |
| Negatiewe kontrole | Data.011 | | 100000 |
| > | Stained | 64.716 | 64716 |
| > > | (FL1-H) DCFH : Geom. Mean | 38.41025 | |
| > | Unstained | 34.446 | 34446 |
| > > | (FL1-H) DCFH : Geom. Mean | 4.26823 | |
| Negatiewe kontrole | Data.012 | | 100000 |
| > | Stained | 59.768 | 59768 |
| > > | (FL1-H) DCFH : Geom. Mean | 35.38355 | |
| > | Unstained | 39.158 | 39158 |
| > > | (FL1-H) DCFH : Geom. Mean | 5.30889 | |
| AQ | Data.043 | | 100000 |
| > | Stained | 2.256 | 2256 |
| > > | (FL1-H) DCFH : Geom. Mean | 36.55747 | |
| > | Unstained | 97.573 | 97573 |
| > > | (FL1-H) DCFH : Geom. Mean | 3.97876 | |
| AQ | Data.044 | | 100000 |
| > | Stained | 1.097 | 1097 |
| > > | (FL1-H) DCFH : Geom. Mean | 28.3441 | |
| > | Unstained | 98.78 | 98780 |
| > > | (FL1-H) DCFH : Geom. Mean | 4.08888 | |
| Buffer | Data.045 | | 100000 |
| > | Stained | 62.284 | 62284 |
| > > | (FL1-H) DCFH : Geom. Mean | 37.52292 | |
| > | Unstained | 36.816 | 36816 |
| > > | (FL1-H) DCFH : Geom. Mean | 4.48411 | |
| Buffer | Data.046 | | 100000 |
| > | Stained | 21.369 | 21369 |
| > > | (FL1-H) DCFH : Geom. Mean | 26.69168 | |
| > | Unstained | 77.166 | 77166 |
| > > | (FL1-H) DCFH : Geom. Mean | 6.25849 | |
| sLipo 100 | Data.047 | | 100000 |
| > | Stained | 47.235 | 47235 |

| | | | |
|-----------|---------------------------|----------|--------|
| > > | (FL1-H) DCFH : Geom. Mean | 111.434 | |
| > | Unstained | 52.439 | 52439 |
| > > | (FL1-H) DCFH : Geom. Mean | 2.97393 | |
| sLipo 100 | Data.048 | | 100000 |
| > | Stained | 51.855 | 51855 |
| > > | (FL1-H) DCFH : Geom. Mean | 104.7016 | |
| > | Unstained | 47.834 | 47834 |
| > > | (FL1-H) DCFH : Geom. Mean | 3.49436 | |
| sLipo 80 | Data.049 | | 100000 |
| > | Stained | 23.246 | 23246 |
| > > | (FL1-H) DCFH : Geom. Mean | 86.31581 | |
| > | Unstained | 76.467 | 76467 |
| > > | (FL1-H) DCFH : Geom. Mean | 2.35879 | |
| sLipo 80 | Data.050 | | 100000 |
| > | Stained | 35.563 | 35563 |
| > > | (FL1-H) DCFH : Geom. Mean | 94.23659 | |
| > | Unstained | 64.168 | 64168 |
| > > | (FL1-H) DCFH : Geom. Mean | 2.54541 | |
| sLipo 60 | Data.051 | | 100000 |
| > | Stained | 13.933 | 13933 |
| > > | (FL1-H) DCFH : Geom. Mean | 74.84806 | |
| > | Unstained | 85.847 | 85847 |
| > > | (FL1-H) DCFH : Geom. Mean | 2.23052 | |
| sLipo 60 | Data.052 | | 100000 |
| > | Stained | 13.769 | 13769 |
| > > | (FL1-H) DCFH : Geom. Mean | 73.42906 | |
| > | Unstained | 85.986 | 85986 |
| > > | (FL1-H) DCFH : Geom. Mean | 2.23074 | |
| sLipo 40 | Data.053 | | 100000 |
| > | Stained | 11.017 | 11017 |
| > > | (FL1-H) DCFH : Geom. Mean | 59.96933 | |
| > | Unstained | 88.728 | 88728 |
| > > | (FL1-H) DCFH : Geom. Mean | 2.35321 | |
| sLipo 40 | Data.054 | | 100000 |
| > | Stained | 10.244 | 10244 |
| > > | (FL1-H) DCFH : Geom. Mean | 63.28981 | |
| > | Unstained | 89.565 | 89565 |
| > > | (FL1-H) DCFH : Geom. Mean | 2.25188 | |
| sLipo 20 | Data.055 | | 100000 |
| > | Stained | 16.574 | 16574 |
| > > | (FL1-H) DCFH : Geom. Mean | 46.89463 | |
| > | Unstained | 82.803 | 82803 |
| > > | (FL1-H) DCFH : Geom. Mean | 3.53481 | |
| sLipo 20 | Data.056 | | 100000 |
| > | Stained | 18.361 | 18361 |
| > > | (FL1-H) DCFH : Geom. Mean | 45.23643 | |
| > | Unstained | 80.937 | 80937 |
| > > | (FL1-H) DCFH : Geom. Mean | 3.40186 | |
| sLipo 0 | Data.057 | | 100000 |
| > | Stained | 7.399 | 7399 |
| > > | (FL1-H) DCFH : Geom. Mean | 25.76872 | |
| > | Unstained | 91.752 | 91752 |
| > > | (FL1-H) DCFH : Geom. Mean | 5.60299 | |
| sLipo 0 | Data.058 | | 100000 |

| | | | |
|-------------|---------------------------|----------|--------|
| > | Stained | 1.47 | 1470 |
| >> | (FL1-H) DCFH : Geom. Mean | 27.46071 | |
| > | Unstained | 98.357 | 98357 |
| >> | (FL1-H) DCFH : Geom. Mean | 4.65807 | |
| AQ Lipo 100 | Data.059 | | 100000 |
| > | Stained | 27.735 | 27735 |
| >> | (FL1-H) DCFH : Geom. Mean | 96.16084 | |
| > | Unstained | 72.068 | 72068 |
| >> | (FL1-H) DCFH : Geom. Mean | 2.1567 | |
| AQ Lipo 100 | Data.060 | | 100000 |
| > | Stained | 24.118 | 24118 |
| >> | (FL1-H) DCFH : Geom. Mean | 90.58597 | |
| > | Unstained | 75.681 | 75681 |
| >> | (FL1-H) DCFH : Geom. Mean | 2.08491 | |
| AQ Lipo 80 | Data.061 | | 100000 |
| > | Stained | 21.009 | 21009 |
| >> | (FL1-H) DCFH : Geom. Mean | 92.68377 | |
| > | Unstained | 78.802 | 78802 |
| >> | (FL1-H) DCFH : Geom. Mean | 2.04306 | |
| AQ Lipo 80 | Data.062 | | 100000 |
| > | Stained | 19.894 | 19894 |
| >> | (FL1-H) DCFH : Geom. Mean | 89.78641 | |
| > | Unstained | 79.931 | 79931 |
| >> | (FL1-H) DCFH : Geom. Mean | 2.01651 | |
| AQ Lipo 60 | Data.063 | | 100000 |
| > | Stained | 29.124 | 29124 |
| >> | (FL1-H) DCFH : Geom. Mean | 102.0359 | |
| > | Unstained | 70.656 | 70656 |
| >> | (FL1-H) DCFH : Geom. Mean | 2.20978 | |
| AQ Lipo 60 | Data.064 | | 100000 |
| > | Stained | 18.937 | 18937 |
| >> | (FL1-H) DCFH : Geom. Mean | 94.37366 | |
| > | Unstained | 80.91 | 80910 |
| >> | (FL1-H) DCFH : Geom. Mean | 1.95381 | |
| AQ Lipo 40 | Data.065 | | 100000 |
| > | Stained | 18.123 | 18123 |
| >> | (FL1-H) DCFH : Geom. Mean | 89.63595 | |
| > | Unstained | 81.729 | 81729 |
| >> | (FL1-H) DCFH : Geom. Mean | 2.01286 | |
| AQ Lipo 40 | Data.066 | | 100000 |
| > | Stained | 15.668 | 15668 |
| >> | (FL1-H) DCFH : Geom. Mean | 90.26174 | |
| > | Unstained | 84.192 | 84192 |
| >> | (FL1-H) DCFH : Geom. Mean | 1.93876 | |
| AQ Lipo 20 | Data.067 | | 100000 |
| > | Stained | 41.376 | 41376 |
| >> | (FL1-H) DCFH : Geom. Mean | 109.4897 | |
| > | Unstained | 58.303 | 58303 |
| >> | (FL1-H) DCFH : Geom. Mean | 2.57129 | |
| AQ Lipo 20 | Data.068 | | 100000 |
| > | Stained | 38.605 | 38605 |
| >> | (FL1-H) DCFH : Geom. Mean | 104.212 | |
| > | Unstained | 61.138 | 61138 |
| >> | (FL1-H) DCFH : Geom. Mean | 2.51542 | |

| | | | |
|-----------|---------------------------|----------|--------|
| AQ Lipo 0 | Data.069 | | 100000 |
| > | Stained | 32.412 | 32412 |
| >> | (FL1-H) DCFH : Geom. Mean | 103.1584 | |
| > | Unstained | 67.373 | 67373 |
| >> | (FL1-H) DCFH : Geom. Mean | 2.20196 | |
| AQ Lipo 0 | Data.070 | | 100000 |
| > | Stained | 28.871 | 28871 |
| >> | (FL1-H) DCFH : Geom. Mean | 103.0342 | |
| > | Unstained | 70.87 | 70870 |
| >> | (FL1-H) DCFH : Geom. Mean | 2.28767 | |

ROS Data in terms of unstained cells (Liposomes no entrapped drug)

| Liposomes | RBS | | RBS in terms of unstained cells | | iRBS | | iRBS in terms of unstained cells | |
|------------------|---------|---------|---------------------------------|----------|---------|---------|----------------------------------|----------|
| 100 | 4.49734 | 4.18486 | 1.298766 | 1.125673 | 2.97393 | 3.49436 | 0.53641 | 0.769546 |
| 80 | 3.76459 | 4.21907 | 1.087158 | 1.134876 | 2.35879 | 2.54541 | 0.425456 | 0.560563 |
| 60 | 2.65694 | 2.21976 | 0.767285 | 0.597087 | 2.23052 | 2.23074 | 0.40232 | 0.491265 |
| 40 | 2.11051 | 2.1631 | 0.609484 | 0.581846 | 2.35321 | 2.25188 | 0.42445 | 0.49592 |
| 20 | 2.42262 | 2.77062 | 0.699617 | 0.745261 | 3.53481 | 3.40186 | 0.637576 | 0.749175 |
| 0 | 5.64183 | 6.24511 | 1.629278 | 1.679854 | 5.60299 | 4.65807 | 1.010615 | 1.025824 |
| Unstained cells | 3.46278 | 3.71765 | 1 | 1 | 5.54414 | 4.54081 | 1 | 1 |
| Negative Control | 2.35967 | 2.39258 | 0.681438 | 0.643573 | 5.26823 | 5.30889 | 0.950234 | 1.16915 |
| Buffer | 2.22451 | 2.13006 | 0.642406 | 0.572959 | 4.48411 | 6.25849 | 0.808802 | 1.378276 |

ROS Data in terms of unstained cells (AQLiposomes)

| AQLiposomes | RBS | | RBS in terms of unstained cells | | iRBS | | iRBS in terms of unstained cells | |
|------------------|---------|---------|---------------------------------|----------|---------|---------|----------------------------------|----------|
| 100 | 2.00286 | 2.43341 | 0.578397 | 0.654556 | 2.1567 | 2.08491 | 0.389005 | 0.459149 |
| 80 | 3.00157 | 3.19901 | 0.866809 | 0.860493 | 2.04306 | 2.01651 | 0.368508 | 0.444086 |
| 60 | 3.59805 | 2.79994 | 1.039064 | 0.753148 | 2.20978 | 1.95381 | 0.398579 | 0.430278 |
| 40 | 3.83064 | 2.58742 | 1.106233 | 0.695983 | 2.01286 | 1.93876 | 0.363061 | 0.426963 |
| 20 | 3.85608 | 4.08636 | 1.113579 | 1.099178 | 2.57129 | 2.51542 | 0.463785 | 0.553958 |
| 0 | 3.89451 | 3.87391 | 1.124677 | 1.042032 | 2.20196 | 2.28767 | 0.397169 | 0.503802 |
| Unstained cells | 3.46278 | 3.71765 | 1 | 1 | 5.54414 | 4.54081 | 1 | 1 |
| Negative Control | 2.35967 | 2.39258 | 0.681438 | 0.643573 | 5.26823 | 5.30889 | 0.950234 | 1.16915 |
| Buffer | 4.67183 | 4.84407 | 1.349156 | 1.302992 | 3.97876 | 4.08888 | 0.717651 | 0.900474 |

ROS statistical analysis (p-values in terms of the negative control)

Values < 0.05 were deemed significant.

| ROS | | | | | |
|------------------|-----------|----------|------------------|------------|----------|
| | Liposomes | | | AQLiposome | |
| | RBC | iRBC | | RBS | iRBS |
| Unstained | 0 | 0.000004 | Unstained | 0.000000 | 0.000004 |
| Negative control | | | Negative control | | |
| Buffer | 1.000000 | 1.000000 | Amodiaquine | 0.000001 | 0.000000 |
| 0 | 1.000000 | 1.000000 | 0 | 0.000224 | 1.000000 |
| 20 | 0.942103 | 0.005839 | 20 | 0.000003 | 0.005839 |
| 40 | 0.002452 | 0.012025 | 40 | 0.000001 | 0.012025 |
| 60 | 0.002815 | 0.042108 | 60 | 0.000001 | 0.042108 |
| 80 | 0.000003 | 0.009927 | 80 | 0.000001 | 0.009927 |
| 100 | 0.000009 | 0.006012 | 100 | 0.000008 | 0.006012 |

Annexure G: Lipid Peroxidation data

Lipid Peroxidation data for uninfected erythrocytes (RBS population)

| Depth | Name | Statistic | #Cells |
|------------------------|---------------------------------|-----------|--------|
| Negatieve kontrolle | LP_0.003 | | 100000 |
| > | Fluor-DHPE subset | 36.347 | 36347 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 6.02276 | |
| > | Fluor-DHPE subset-2 | 61.974 | 61974 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 26.67975 | |
| Negatieve kontrolle | LP_0.004 | | 100000 |
| > | Fluor-DHPE subset | 32.044 | 32044 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 6.48516 | |
| > | Fluor-DHPE subset-2 | 66.489 | 66489 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 27.38311 | |
| AQ | LP_0.007 | | 100000 |
| > | Fluor-DHPE subset | 97.538 | 97538 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 3.7002 | |
| > | Fluor-DHPE subset-2 | 2.034 | 2034 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 18.31058 | |
| AQ | LP_0.008 | | 100000 |
| > | Fluor-DHPE subset | 98.52 | 98520 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 3.49999 | |
| > | Fluor-DHPE subset-2 | 1.157 | 1157 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 18.43051 | |
| Buffer | LP_0.009 | | 100000 |
| > | Fluor-DHPE subset | 38.51 | 38510 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 6.57812 | |
| > | Fluor-DHPE subset-2 | 59.715 | 59715 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 25.27462 | |
| Buffer | LP_0.010 | | 100000 |
| > | Fluor-DHPE subset | 37.039 | 37039 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 6.69284 | |
| > | Fluor-DHPE subset-2 | 61.183 | 61183 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 25.33289 | |
| sLipo 100 | LP_0.011 | | 100000 |
| > | Fluor-DHPE subset | 66.722 | 66722 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 3.92606 | |
| > | Fluor-DHPE subset-2 | 31.823 | 31823 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 24.9375 | |
| sLipo 100 | LP_0.012 | | 100000 |
| > | Fluor-DHPE subset | 66.124 | 66124 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 3.9077 | |
| > | Fluor-DHPE subset-2 | 32.483 | 32483 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 25.22015 | |
| sLipo 80 | LP_0.013 | | 100000 |
| > | Fluor-DHPE subset | 66.367 | 66367 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 3.76838 | |
| > | Fluor-DHPE subset-2 | 32.251 | 32251 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 25.39599 | |
| sLipo 80 | LP_0.014 | | 100000 |
| > | Fluor-DHPE subset | 66.688 | 66688 |

| | | | |
|-------------|---------------------------------|----------|--------|
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 3.83518 | |
| > | Fluor-DHPE subset-2 | 31.913 | 31913 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 24.80622 | |
| sLipo 60 | LP_0.015 | | 100000 |
| > | Fluor-DHPE subset | 64.865 | 64865 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 4.65726 | |
| > | Fluor-DHPE subset-2 | 33.484 | 33484 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 24.77954 | |
| sLipo 60 | LP_0.016 | | 100000 |
| > | Fluor-DHPE subset | 66.888 | 66888 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 4.51014 | |
| > | Fluor-DHPE subset-2 | 31.551 | 31551 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 24.61015 | |
| sLipo 40 | LP_0.017 | | 100000 |
| > | Fluor-DHPE subset | 74.238 | 74238 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 4.58902 | |
| > | Fluor-DHPE subset-2 | 24.242 | 24242 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 23.19333 | |
| sLipo 40 | LP_0.018 | | 100000 |
| > | Fluor-DHPE subset | 70.746 | 70746 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 4.54741 | |
| > | Fluor-DHPE subset-2 | 27.805 | 27805 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 23.66225 | |
| sLipo 20 | LP_0.019 | | 100000 |
| > | Fluor-DHPE subset | 76.711 | 76711 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 5.21789 | |
| > | Fluor-DHPE subset-2 | 21.728 | 21728 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 22.53577 | |
| sLipo 20 | LP_0.020 | | 100000 |
| > | Fluor-DHPE subset | 75.426 | 75426 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 5.22557 | |
| > | Fluor-DHPE subset-2 | 23.061 | 23061 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 23.02917 | |
| sLipo 0 | LP_0.021 | | 100000 |
| > | Fluor-DHPE subset | 43.105 | 43105 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 7.02394 | |
| > | Fluor-DHPE subset-2 | 54.793 | 54793 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 23.5433 | |
| sLipo 0 | LP_0.022 | | 100000 |
| > | Fluor-DHPE subset | 40.546 | 40546 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 6.91726 | |
| > | Fluor-DHPE subset-2 | 57.589 | 57589 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 24.25668 | |
| AQ Lipo 100 | LP_0.023 | | 100000 |
| > | Fluor-DHPE subset | 95.859 | 95859 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 4.00829 | |
| > | Fluor-DHPE subset-2 | 3.616 | 3616 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 19.56915 | |
| AQ Lipo 100 | LP_0.024 | | 100000 |
| > | Fluor-DHPE subset | 96.808 | 96808 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 3.82431 | |
| > | Fluor-DHPE subset-2 | 2.781 | 2781 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 19.94967 | |
| AQ Lipo 80 | LP_0.025 | | 100000 |

| | | | |
|-------------|---------------------------------|----------|--------|
| > | Fluor-DHPE subset | 96.704 | 96704 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 3.4213 | |
| > | Fluor-DHPE subset-2 | 2.853 | 2853 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 19.63956 | |
| AQ Lipo 80 | LP_0.026 | | 100000 |
| > | Fluor-DHPE subset | 95.945 | 95945 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 3.6983 | |
| > | Fluor-DHPE subset-2 | 3.573 | 3573 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 20.97437 | |
| AQ Lipo 60 | LP_0.027 | | 100000 |
| > | Fluor-DHPE subset | 97.463 | 97463 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 3.704 | |
| > | Fluor-DHPE subset-2 | 2.159 | 2159 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 19.15863 | |
| AQ Lipo 60 | LP_0.028 | | 100000 |
| > | Fluor-DHPE subset | 97.505 | 97505 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 3.65901 | |
| > | Fluor-DHPE subset-2 | 2.14 | 2140 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 20.37988 | |
| AQ Lipo 40 | LP_0.029 | | 100000 |
| > | Fluor-DHPE subset | 96.212 | 96212 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 3.55239 | |
| > | Fluor-DHPE subset-2 | 3.38 | 3380 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 21.85172 | |
| AQ Lipo 40 | LP_0.030 | | 100000 |
| > | Fluor-DHPE subset | 96.381 | 96381 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 3.60486 | |
| > | Fluor-DHPE subset-2 | 3.199 | 3199 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 21.96304 | |
| AQ Lipo 20 | LP_0.031 | | 100000 |
| > | Fluor-DHPE subset | 94.36 | 94360 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 3.74828 | |
| > | Fluor-DHPE subset-2 | 5.082 | 5082 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 21.81941 | |
| AQ Lipo 20 | LP_0.032 | | 100000 |
| > | Fluor-DHPE subset | 92.458 | 92458 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 3.86429 | |
| > | Fluor-DHPE subset-2 | 6.79 | 6790 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 22.04335 | |
| AQ Lipo 0 | LP_0.033 | | 100000 |
| > | Fluor-DHPE subset | 76.452 | 76452 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 4.36767 | |
| > | Fluor-DHPE subset-2 | 22.158 | 22158 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 23.23959 | |
| AQ Lipo 0 | LP_0.034 | | 100000 |
| > | Fluor-DHPE subset | 74.642 | 74642 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 4.23327 | |
| > | Fluor-DHPE subset-2 | 24.008 | 24008 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 23.8389 | |
| Skoon selle | LP_0.071 | | 100000 |
| > | Fluor-DHPE subset | 99.978 | 99978 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 2.36599 | |
| > | Fluor-DHPE subset-2 | 0.018 | 18 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 24.13212 | |

| | | | |
|-------------|---------------------------------|----------|--------|
| Skoon selle | LP_0.072 | | 100000 |
| > | Fluor-DHPE subset | 99.983 | 99983 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 2.33998 | |
| > | Fluor-DHPE subset-2 | 0.012 | 12 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 18.55901 | |

Lipid Peroxidation data for *P. falciparum* infected erythrocytes (iRBS populations)

| Depth | Name | Statistic | #Cells |
|--------------------|---------------------------------|-----------|--------|
| Negatiewe kontrole | LP_0.037 | | 100000 |
| > | Fluor-DHPE subset | 91.843 | 91843 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 5.34677 | |
| > | Fluor-DHPE subset-2 | 7.129 | 7129 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 23.42479 | |
| Negatiewe kontrole | LP_0.038 | | 100000 |
| > | Fluor-DHPE subset | 96.74 | 96740 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 4.70356 | |
| > | Fluor-DHPE subset-2 | 2.743 | 2743 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 23.23139 | |
| AQ | LP_0.041 | | 100000 |
| > | Fluor-DHPE subset | 99.941 | 99941 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 1.90558 | |
| > | Fluor-DHPE subset-2 | 0.054 | 54 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 46.0156 | |
| AQ | LP_0.042 | | 100000 |
| > | Fluor-DHPE subset | 99.943 | 99943 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 1.89923 | |
| > | Fluor-DHPE subset-2 | 0.05 | 50 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 45.75817 | |
| Buffer | LP_0.043 | | 100000 |
| > | Fluor-DHPE subset | 99.246 | 99246 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 3.90691 | |
| > | Fluor-DHPE subset-2 | 0.578 | 578 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 23.78654 | |
| Buffer | LP_0.044 | | 100000 |
| > | Fluor-DHPE subset | 98.639 | 98639 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 4.16393 | |
| > | Fluor-DHPE subset-2 | 1.092 | 1092 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 22.98603 | |
| sLipo 100 | LP_0.045 | | 100000 |
| > | Fluor-DHPE subset | 99.224 | 99224 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 3.03579 | |
| > | Fluor-DHPE subset-2 | 0.661 | 661 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 25.13651 | |
| sLipo 100 | LP_0.046 | | 100000 |
| > | Fluor-DHPE subset | 96.819 | 96819 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 3.64833 | |
| > | Fluor-DHPE subset-2 | 2.847 | 2847 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 25.44556 | |
| sLipo 80 | LP_0.047 | | 100000 |
| > | Fluor-DHPE subset | 98.547 | 98547 |

| | | | |
|-------------|---------------------------------|----------|--------|
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 3.2134 | |
| > | Fluor-DHPE subset-2 | 1.271 | 1271 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 25.20444 | |
| sLipo 80 | LP_0.048 | | 100000 |
| > | Fluor-DHPE subset | 96.496 | 96496 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 3.59375 | |
| > | Fluor-DHPE subset-2 | 3.127 | 3127 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 25.93933 | |
| sLipo 60 | LP_0.049 | | 100000 |
| > | Fluor-DHPE subset | 96.835 | 96835 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 3.53899 | |
| > | Fluor-DHPE subset-2 | 2.843 | 2843 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 25.16426 | |
| sLipo 60 | LP_0.050 | | 100000 |
| > | Fluor-DHPE subset | 96.058 | 96058 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 3.60832 | |
| > | Fluor-DHPE subset-2 | 3.547 | 3547 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 25.85031 | |
| sLipo 40 | LP_0.051 | | 100000 |
| > | Fluor-DHPE subset | 96.915 | 96915 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 3.36958 | |
| > | Fluor-DHPE subset-2 | 2.818 | 2818 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 26.26666 | |
| sLipo 40 | LP_0.052 | | 100000 |
| > | Fluor-DHPE subset | 96.163 | 96163 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 3.49076 | |
| > | Fluor-DHPE subset-2 | 3.502 | 3502 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 25.93533 | |
| sLipo 20 | LP_0.053 | | 100000 |
| > | Fluor-DHPE subset | 96.508 | 96508 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 3.28064 | |
| > | Fluor-DHPE subset-2 | 3.233 | 3233 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 28.48245 | |
| sLipo 20 | LP_0.054 | | 100000 |
| > | Fluor-DHPE subset | 95.346 | 95346 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 3.41438 | |
| > | Fluor-DHPE subset-2 | 4.347 | 4347 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 29.51789 | |
| sLipo 0 | LP_0.055 | | 100000 |
| > | Fluor-DHPE subset | 90.284 | 90284 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 6.32057 | |
| > | Fluor-DHPE subset-2 | 8.469 | 8469 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 23.12322 | |
| sLipo 0 | LP_0.056 | | 100000 |
| > | Fluor-DHPE subset | 97.681 | 97681 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 4.83729 | |
| > | Fluor-DHPE subset-2 | 1.933 | 1933 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 22.90438 | |
| AQ Lipo 100 | LP_0.057 | | 100000 |
| > | Fluor-DHPE subset | 98.892 | 98892 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 2.9383 | |
| > | Fluor-DHPE subset-2 | 0.969 | 969 |
| > > | (FL1-H) Fluor-DHPE : Geom. Mean | 24.82158 | |
| AQ Lipo 100 | LP_0.058 | | 100000 |

| | | | |
|------------|---------------------------------|----------|--------|
| > | Fluor-DHPE subset | 98.679 | 98679 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 3.02319 | |
| > | Fluor-DHPE subset-2 | 1.172 | 1172 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 25.34955 | |
| AQ Lipo 80 | LP_0.059 | | 100000 |
| > | Fluor-DHPE subset | 97.577 | 97577 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 3.2289 | |
| > | Fluor-DHPE subset-2 | 2.189 | 2189 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 25.76948 | |
| AQ Lipo 80 | LP_0.060 | | 100000 |
| > | Fluor-DHPE subset | 97.714 | 97714 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 3.06847 | |
| > | Fluor-DHPE subset-2 | 2.096 | 2096 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 26.68228 | |
| AQ Lipo 60 | Data.061 | | 100000 |
| > | Fluor-DHPE subset | 78.068 | 78068 |
| >> | (FL1-H) DCFH : Geom. Mean | 2.00083 | |
| > | Fluor-DHPE subset-2 | 21.692 | 21692 |
| >> | (FL1-H) DCFH : Geom. Mean | 88.23734 | |
| AQ Lipo 60 | LP_0.062 | | 100000 |
| > | Fluor-DHPE subset | 94.482 | 94482 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 3.45394 | |
| > | Fluor-DHPE subset-2 | 5.112 | 5112 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 27.98029 | |
| AQ Lipo 40 | LP_0.063 | | 100000 |
| > | Fluor-DHPE subset | 92.598 | 92598 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 3.77301 | |
| > | Fluor-DHPE subset-2 | 6.851 | 6851 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 28.4512 | |
| AQ Lipo 40 | LP_0.064 | | 100000 |
| > | Fluor-DHPE subset | 90.098 | 90098 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 3.90285 | |
| > | Fluor-DHPE subset-2 | 9.254 | 9254 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 28.88407 | |
| AQ Lipo 20 | LP_0.065 | | 100000 |
| > | Fluor-DHPE subset | 84.44 | 84440 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 4.3444 | |
| > | Fluor-DHPE subset-2 | 14.768 | 14768 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 31.74193 | |
| AQ Lipo 20 | LP_0.066 | | 100000 |
| > | Fluor-DHPE subset | 82.97 | 82970 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 4.48859 | |
| > | Fluor-DHPE subset-2 | 16.131 | 16131 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 30.73023 | |
| AQ Lipo 0 | LP_0.067 | | 100000 |
| > | Fluor-DHPE subset | 51.335 | 51335 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 5.23411 | |
| > | Fluor-DHPE subset-2 | 47.518 | 47518 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 41.43572 | |
| AQ Lipo 0 | LP_0.068 | | 100000 |
| > | Fluor-DHPE subset | 45.969 | 45969 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 5.47866 | |
| > | Fluor-DHPE subset-2 | 52.872 | 52872 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 44.31799 | |

| | | | |
|-------------|---------------------------------|----------|--------|
| Skoon selle | LP_0.069 | | 100000 |
| > | Fluor-DHPE subset | 99.652 | 99652 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 2.55228 | |
| > | Fluor-DHPE subset-2 | 0.336 | 336 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 46.51664 | |
| Skoon selle | LP_0.070 | | 100000 |
| > | Fluor-DHPE subset | 99.971 | 99971 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 2.37156 | |
| > | Fluor-DHPE subset-2 | 0.027 | 27 |
| >> | (FL1-H) Fluor-DHPE : Geom. Mean | 33.94814 | |

Lipid Peroxidation Data in terms of unstained cells (Liposomes no entrapped drug)

| Liposomes | RBS | | RBS in terms of unstained cells | | iRBS | | iRBS in terms of unstained cells | |
|------------------|---------|---------|---------------------------------|----------|---------|---------|----------------------------------|----------|
| | | | | | | | | |
| 100 | 3.92606 | 3.9077 | 1.659373 | 1.669972 | 3.03579 | 3.64833 | 1.189442 | 1.538367 |
| 80 | 3.76838 | 3.83518 | 1.592729 | 1.63898 | 3.2134 | 3.59375 | 1.259031 | 1.515353 |
| 60 | 4.65726 | 4.51014 | 1.968419 | 1.927427 | 3.53899 | 3.60832 | 1.386599 | 1.521496 |
| 40 | 4.58902 | 4.54741 | 1.939577 | 1.943354 | 3.36958 | 3.49076 | 1.320223 | 1.471926 |
| 20 | 5.21789 | 5.22557 | 2.205373 | 2.233169 | 3.28064 | 3.41438 | 1.285376 | 1.439719 |
| 0 | 7.02394 | 6.91726 | 2.968711 | 2.956119 | 6.32057 | 4.83729 | 2.476441 | 2.039708 |
| Unstained cells | 2.36599 | 2.33998 | 1 | 1 | 2.55228 | 2.37156 | 1 | 1 |
| Negative Control | 6.02276 | 6.48516 | 2.545556 | 2.77146 | 5.34677 | 4.70356 | 2.094899 | 1.983319 |
| Buffer | 6.57812 | 6.69284 | 2.780282 | 2.860212 | 3.90691 | 4.16393 | 1.530753 | 1.755777 |

Lipid Peroxidation Data in terms of unstained cells (AQLiposomes)

| Liposomes | RBS | | RBS in terms of unstained cells | | iRBS | | iRBS in terms of unstained cells | |
|------------------|---------|---------|---------------------------------|----------|---------|---------|----------------------------------|----------|
| | | | | | | | | |
| 100 | 4.00829 | 3.82431 | 1.694128 | 1.634334 | 2.9383 | 3.02319 | 1.151245 | 1.274769 |
| 80 | 3.4213 | 3.6983 | 1.446033 | 1.580484 | 3.2289 | 3.06847 | 1.265104 | 1.293861 |
| 60 | 3.704 | 3.65901 | 1.565518 | 1.563693 | 2.00083 | 3.45394 | 0.783938 | 1.4564 |
| 40 | 3.55239 | 3.60486 | 1.501439 | 1.540552 | 3.77301 | 3.90285 | 1.47829 | 1.645689 |
| 20 | 3.74828 | 3.86429 | 1.584233 | 1.65142 | 4.3444 | 4.48859 | 1.702164 | 1.892674 |
| 0 | 4.36767 | 4.23327 | 1.846022 | 1.809105 | 5.23411 | 5.47866 | 2.050759 | 2.31015 |
| Unstained cells | 2.36599 | 2.33998 | 1 | 1 | 2.55228 | 2.37156 | 1 | 1 |
| Negative Control | 6.02276 | 6.48516 | 2.545556 | 2.77146 | 5.34677 | 4.70356 | 2.094899 | 1.983319 |
| Buffer | 3.7002 | 3.49999 | 1.563912 | 1.495735 | 1.90558 | 1.89923 | 0.746619 | 0.800836 |

Lipid Peroxidation Data in terms of unstained cells (Liposomes no entrapped drug) Data inverted and multiplied by 100, as used in results and discussion

| | RBS | | iRBS | |
|-------------------|------------|------------|------------|------------|
| Non stained cells | 100.000000 | 100.000000 | 100.000000 | 100.000000 |
| Negative control | 39.284150 | 36.082070 | 47.735000 | 50.420530 |
| 0% Liposomes | 33.684650 | 33.828140 | 40.380530 | 49.026630 |
| 20% Liposomes | 45.343800 | 44.779420 | 77.798250 | 69.458000 |
| 40% Liposomes | 51.557630 | 51.457430 | 75.744780 | 67.938190 |
| 60% Liposomes | 50.802190 | 51.882640 | 72.118900 | 65.724780 |
| 80% Liposomes | 62.785320 | 61.013560 | 79.426160 | 65.991230 |
| 100% Liposomes | 60.263730 | 59.881240 | 84.073040 | 65.004000 |

Lipid Peroxidation Data in terms of unstained cells (AQLiposomes) Data inverted and multiplied by 100, as used in results and discussion

| | RBS | | iRBS | |
|-----------------------|------------|------------|------------|------------|
| Non stained cells | 100.000000 | 100.000000 | 100.000000 | 100.000000 |
| Negative control | 39.284150 | 36.082070 | 47.735000 | 50.420530 |
| AQ (0.5% <i>m/v</i>) | 63.942210 | 66.856770 | 133.937200 | 124.869600 |
| 0% AQLiposomes | 54.170540 | 55.275950 | 40.380530 | 49.026630 |
| 20% AQLiposomes | 63.122030 | 60.553950 | 77.798250 | 69.458000 |
| 40% AQLiposomes | 66.602780 | 64.911800 | 75.744780 | 67.938190 |
| 60% AQLiposomes | 63.876620 | 63.951170 | 72.118900 | 65.724780 |
| 80% AQLiposomes | 69.154720 | 63.271760 | 79.426160 | 65.991230 |
| 100% AQLiposomes | 59.027420 | 61.187000 | 84.073040 | 65.004000 |

Lipid Peroxidation statistical analysis (p-values in terms of the negative control)

Values < 0.05 were deemed significant.

| Lipid peroxidation | Liposomes | | AQLiposome | | |
|--------------------|-----------|----------|------------------|----------|----------|
| | RBC | iRBC | RBS | iRBS | |
| Unstained | 0.000000 | 0.000004 | Unstained | 0.000000 | 0.000004 |
| Negative control | | | Negative control | | |
| Buffer | 1.000000 | 1.000000 | Amodiaquine | 0.000001 | 0.000000 |
| 0 | 1.000000 | 1.000000 | 0 | 0.000224 | 1.000000 |
| 20 | 0.942103 | 0.005839 | 20 | 0.000003 | 0.005839 |
| 40 | 0.002452 | 0.012025 | 40 | 0.000001 | 0.012025 |
| 60 | 0.002815 | 0.042108 | 60 | 0.000001 | 0.042108 |
| 80 | 0.000003 | 0.009927 | 80 | 0.000001 | 0.009927 |
| 100 | 0.000009 | 0.006012 | 100 | 0.000008 | 0.006012 |