

September 22, 2020

O&M Halyard, Inc. Steven Dowdley Associate Director of Regulatory Affairs 9120 Lockwood Blvd Mechanicsville, Virginia 23116

Re: K200843

Trade/Device Name: Halyard Pink Underguard Zero Nitrile Sterile Powder-Free Exam Glove Tested with Chemotherapy Drugs
Regulation Number: 21 CFR 880.6250
Regulation Name: Non-Powdered Patient Examination Glove
Regulatory Class: Class I, reserved
Product Code: LZA, LZC, QDO
Dated: August 17, 2020
Received: August 21, 2020

Dear Steven Dowdley:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. Although this letter refers to your product as a device, please be aware that some cleared products may instead be combination products. The 510(k) Premarket Notification Database located at https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm identifies combination product submissions. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal

statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803) for devices or postmarketing safety reporting (21 CFR 4, Subpart B) for combination products (see https://www.fda.gov/combination-products/guidance-regulatory-information/postmarketing-safety-reporting-combination-products); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820) for devices or current good manufacturing practices (21 CFR 4, Subpart A) for combination products; and, if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <u>https://www.fda.gov/medical-devices/medical-device-safety/medical-device-reporting-mdr-how-report-medical-device-problems</u>.

For comprehensive regulatory information about medical devices and radiation-emitting products, including information about labeling regulations, please see Device Advice (<u>https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance</u>) and CDRH Learn (<u>https://www.fda.gov/training-and-continuing-education/cdrh-learn</u>). Additionally, you may contact the Division of Industry and Consumer Education (DICE) to ask a question about a specific regulatory topic. See the DICE website (<u>https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/contact-us-division-industry-and-consumer-education-dice</u>) for more information or contact DICE by email (<u>DICE@fda.hhs.gov</u>) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

For: CAPT Elizabeth Claverie, M.S.
Assistant Director
DHT4B: Division of Infection Control and Plastic Surgery Devices
OHT4: Office of Surgical and Infection Control Devices
Office of Product Evaluation and Quality
Center for Devices and Radiological Health

Enclosure

DEPARTMENT OF HEALTH AND HUMAN SERVICES Food and Drug Administration

Indications for Use

510(k) Number (if known) K200843

Device Name

Halyard Pink Underguard Zero Nitrile Sterile Powder-Free Exam Gloves Tested with Chemotherapy Drugs

Indications for Use (Describe)

Halyard Pink Underguard Zero Nitrile Sterile Powder-Free Exam Gloves Tested with Chemotherapy Drugs are disposable device intended for medical purposes that are worn on the examiner's hand to prevent contamination between patient and examiner. These gloves were tested for use with the following chemotherapy drugs and Fentanyl Citrate as per ASTM-D6978-05: Azacitidine (Vidaza) (25 mg/ml) No breakthrough up to 240 minutes Bendamustine (5 mg/ml) No breakthrough up to 240 minutes Bleomycin sulfate (15 mg/ml) No breakthrough up to 240 minutes Bortezomib (6 mg/ml) No breakthrough up to 240 minutes Busulfan (6 mg/ml) No breakthrough up to 240 minutes Capecitabine (26 mg/ml) No breakthrough up to 240 minutes Carboplatin (10 mg/ml) No breakthrough up to 240 minutes Carfilzomib (2 mg/ml) No breakthrough up to 240 minutes Carfilzomib (2 mg/ml) No breakthrough up to 240 minutes

Cetuximab (Erbitux) (2 mg/ml) No breakthrough up to 240 minutes

Chloroquine (50 mg/ml) No breakthrough up to 240 minutes

Cisplatin (1 mg/ml) No breakthrough up to 240 minutes Cladribine (1.0 mg/ml) No breakthrough up to 240 minutes

Cyclophosphamide (20 mg/ml) No breakthrough up to 240 minutes

Cyclosporine A (100 mg/ml) No breakthrough up to 240 minutes

Cytarabine HCL (100 mg/ml) No breakthrough up to 240 minutes

Cytovene (10 mg/ml) No breakthrough up to 240 minutes

Dacarbazine (10 mg/ml) No breakthrough up to 240 minutes Dactinomycin (0.5 mg/ml) No breakthrough up to 240 minutes

Daunorubicin HCL (5 mg/ml) No breakthrough up to 240 minutes Decitabine (5 mg/ml) No breakthrough up to 240 minutes

Docetaxel (10 mg/ml) No breakthrough up to 240 minutes Doxorubicin HCL (2 mg/ml) No breakthrough up to 240 minutes

Epirubicin (Ellence) (2 mg/ml) No breakthrough up to 240 minutes Etoposide (20 mg/ml) No breakthrough up to 240 minutes Fludarabine (25 mg/ml) No breakthrough up to 240 minutes 5-Fluorouracil (50 mg/ml) Nobreakthrough up to 240 minutes

Fulvestrant (50 mg/ml) No breakthrough up to 240 minutes Gemcitabine (38 mg/ml) No breakthrough up to 240 minutes Idarubicin (1 mg/ml) No breakthrough up to 240 minutes Ifosfamide (50 mg/ml) No breakthrough up to 240 minutes Irinotecan (20 mg/ml) No breakthrough up to 240 minutes Leuprolide acetate salt (5mg/ml) No breakthrough up to 240 minutes Mechlorethamine HCL (1 mg/ml) No breakthrough up to 240 minutes

Melphalan (5 mg/ml) No breakthrough up to 240 minutes Methotrexate (25 mg/ml) No breakthrough up to 240 minutes

Mitomycin-C (0.5 mg/ml) No breakthrough up to 240 minutes

List of chemotherapy drugs continues on next page

K200843: Continuation of the list of chemotherapy drugs from previous page. These gloves were tested for use with the following chemotherapy drugs and Fentanyl Citrate as per ASTM D6978-05:

Mitoxantrone (2 mg/ml) No breakthrough up to 240 minutes Oxaliplatin (2 mg/ml) No breakthrough up to 240 minutes Paclitaxel (6 mg/ml) No breakthrough up to 240 minutes Pemetrexed (25 mg/ml) No breakthrough up to 240 minutes Raltitrexed (0.5 mg/ml) No breakthrough up to 240 minutes Retrovir (10 mg/ml) No breakthrough up to 240 minutes Rituximab (10 mg/ml) No breakthrough up to 240 minutes Temsirolimus (25 mg/ml) No breakthrough up to 240 minutes ThioTEPA (10 mg/ml) No breakthrough up to 240 minutes Topotecan HCL (1 mg/ml) No breakthrough up to 240 minutes Triclosan (1 mg/ml) No breakthrough up to 240 minutes Trisenox (0.1 mg/ml) No breakthrough up to 240 minutes Vinblastine (1 mg/ml) No breakthrough up to 240 minutes Vincrinstine Sulfate (1 mg/ml) No breakthrough up to 240 minutes Vinorelbine (10 mg/ml) No breakthrough up to 240 minutes Zoledronic Acid (0.8 mg/ml) No breakthrough up to 240 minutes

FentanyI Citrate Injection, (100mcg /2mL). No breakthrough up to 240 minutes

CAUTION: The following chemotherapy drugs and concentration showed breakthrough detected in less than 60 minutes: Carmustine (BCNU): 59 minutes.

Type of Use (Select one or both, as applicable)

Prescription Use (Part 21 CFR 801 Subpart D)

Over-The-Counter Use (21 CFR 801 Subpart C)

CONTINUE ON A SEPARATE PAGE IF NEEDED.

This section applies only to requirements of the Paperwork Reduction Act of 1995.

DO NOT SEND YOUR COMPLETED FORM TO THE PRA STAFF EMAIL ADDRESS BELOW.

The burden time for this collection of information is estimated to average 79 hours per response, including the time to review instructions, search existing data sources, gather and maintain the data needed and complete and review the collection of information. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden, to:

> Department of Health and Human Services Food and Drug Administration Office of Chief Information Officer Paperwork Reduction Act (PRA) Staff PRAStaff@fda.hhs.gov

"An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB number."

510(k) Summary

Data Cummera	Sentember 10, 2020
Date Summary	September 19, 2020
was Prepared	
510(k) Submitter	O & M Halyard, Inc.
	5405 Windward Parkway
	Alpharetta, GA 30004
Primary Contact for	Steven Dowdley, RAC
this 510(k) Submission	Tel: 678-451-8062 Email: <u>steven.dowdley@hyh.com</u>
	Email. <u>Steven.dowdley@nyn.com</u>
Device Trade Name	Halyard Pink Underguard Zero Nitrile Sterile Powder-Free Exam Gloves Tested with
	Chemotherapy Drugs
Device Common Name	Medical Exam Gloves
Device Product Code	LZC
and Classification Name	Class I, 21 CFR §880.6250 Patient Examination Glove
	LZC Class I, 21 CFR §880.6250 Patient Examination Glove, Specialty
	OQD Class I, 21 CFR §880.6250 Fentanyl and other opioid protection glove
Predicate Device	Halyard Pink Underguard Zero Nitrile Powder-Free Exam Glove Tested for
	Use with Chemotherapy Drugs cleared under K183132
Subject Device Description	The Halyard Pink Underguard Zero Nitrile Sterile Powder-Free Exam
	Gloves Tested with Chemotherapy Drugs are disposable, pink-colored,
	chlorinated, nitrile, powder-free, textured fingertip, ambidextrous, sterile
	patient examination gloves.
	The device follows consensus standards:
	 ASTM D5151-06 Standard Test Method for Detection of Holes in Medical
	Gloves
	 ASTM D6319-10 Standard Specification for Nitrile Examination Gloves
	for Medical Applications
	 ASTM D6124-06 Standard Test Method for Residual Powder on Medical
	Gloves
	 ASTM D6978-05 Standard Practice for Assessment of Resistance of
	Medical Gloves to Permeation by Chemotherapy Drugs
	ISO 10993-11:2017, Biological evaluation of medical devices - Part11:
	Tests for Systemic Toxicity
	 ISO 10993-10: 2010: Biological evaluation of medical devices - Part 10: Toota for britten and Oking Compiliantian
	Tests for Irritation and Skin Sensitization
Indiantiona for Llas for the	The Helvard Dink Underguard Zara Nitrile Starile Devider Free Free Clause
Indications for Use for the	The Halyard Pink Underguard Zero Nitrile Sterile Powder-Free Exam Gloves
Halyard Pink Underguard Zero, Sterile Powder-Free Exam Glove	Tested with Chemotherapy Drugs are disposable devices intended for medical purposes that is worn on the examiner's hand to prevent contamination between
Tested with Chemotherapy	patient and examiner. These gloves were tested for use with the following
rested with onemotierapy	patient and examiner. These gives were tested for use with the following
	1

Drugs	chemotherapy drugs and Fentanyl Citrate as per ASTM -D6978-05.:
2.490	
	Azacitidine (Vidaza) (25 mg/ml) No breakthrough up to 240 minutes
	Bendamustine (5 mg/ml) No breakthrough up to 240 minutes
	Bleomycin sulfate (15 mg/ml) No breakthrough up to 240 minutes
	Bortezomib (6 mg/ml) No breakthrough up to 240 minutes
	Busulfan (6 mg/ml) No breakthrough up to 240 minutes Capecitabine (26 mg/ml) No breakthrough up to 240 minutes
	Carboplatin (10 mg/ml) No breakthrough up to 240 minutes
	Carfilzomib (2 mg/ml) No breakthrough up to 240 minutes
	Carmustine (3.3 mg/ml) permeation occurred at 59.0 minutes
	Cetuximab (Erbitux) (2 mg/ml) No breakthrough up to 240 minutes
	Chloroquine (50 mg/ml) No breakthrough up to 240 minutes
	Cisplatin (1 mg/ml) No breakthrough up to 240 minutes
	Cladribine (1.0 mg/ml) No breakthrough up to 240 minutes
	Cyclophosphamide (20 mg/ml) No breakthrough up to 240 minutes
	Cyclosporine A (100 mg/ml) No breakthrough up to 240 minutes Cytarabine HCL (100 mg/ml) No breakthrough up to 240 minutes
	Cytovene (10 mg/ml) No breakthrough up to 240 minutes
	Dacarbazine (10 mg/ml) No breakthrough up to 240 minutes
	Dactinomycin (0.5 mg/ml) No breakthrough up to 240 minutes
	Daunorubicin HCL (5 mg/ml) No breakthrough up to 240 minutes
	Decitabine (5 mg/ml) No breakthrough up to 240 minutes
	Docetaxel (10 mg/ml) No breakthrough up to 240 minutes
	Doxorubicin HCL (2 mg/ml) No breakthrough up to 240 minutes
	Epirubicin (Ellence) (2 mg/ml) No breakthrough up to 240 minutes
	Etoposide (20 mg/ml) No breakthrough up to 240 minutes Fludarabine (25 mg/ml) No breakthrough up to 240 minutes
	5-Fluorouracil (50 mg/ml) No breakthrough up to 240 minutes
	Fulvestrant (50 mg/ml) No breakthrough up to 240 minutes
	Gemcitabine (38 mg/ml) No breakthrough up to 240 minutes
	Idarubicin (1 mg/ml) No breakthrough up to 240 minutes
	Ifosfamide (50 mg/ml) No breakthrough up to 240 minutes
	Irinotecan (20 mg/ml) No breakthrough up to 240 minutes
	Leuprolide acetate salt (5mg/ml) No breakthrough up to 240 minutes
	Mechlorethamine HCL (1 mg/ml) No breakthrough up to 240 minutes Melphalan (5 mg/ml) No breakthrough up to 240 minutes
	Methotrexate (25 mg/ml) No breakthrough up to 240 minutes
	Mitomycin-C (0.5 mg/ml) No breakthrough up to 240 minutes
	Mitoxantrone (2 mg/ml) No breakthrough up to 240 minutes
	Oxaliplatin (2 mg/ml) No breakthrough up to 240 minutes
	Paclitaxel (6 mg/ml) No breakthrough up to 240 minutes
	Pemetrexed (25 mg/ml) No breakthrough up to 240 minutes
	Raltitrexed (0.5 mg/ml) No breakthrough up to 240 minutes
	Retrovir (10 mg/ml) No breakthrough up to 240 minutes Rituximab (10 mg/ml) No breakthrough up to 240 minutes
	Temsirolimus (25 mg/ml) No breakthrough up to 240 minutes
	ThioTEPA (10 mg/ml) No breakthrough up to 240 minutes
	Topotecan HCL (1 mg/ml) No breakthrough up to 240 minutes
	Triclosan (1 mg/ml) No breakthrough up to 240 minutes
	Trisenox (0.1 mg/ml) No breakthrough up to 240 minutes
	Vinblastine (1 mg/ml) No breakthrough up to 240 minutes
	Vincrinstine Sulfate (1 mg/ml) No breakthrough up to 240 minutes
	Vinorelbine (10 mg/ml) No breakthrough up to 240 minutes Zoledronic Acid (0.8 mg/ml) No breakthrough up to 240 minutes
	Zoreuronic Acia (0.0 mg/mi) no preaktinough up to 240 minutes
	Fentanyl Citrate (100mcg/2ml) No breakthrough up to 240 minutes.
	CAUTION: The following chemotherapy drugs and concentration showed breakthrough detected in less than 60 minutes: Carmustine (BCNU): 59 minutes.

Summary of comparison of technological characteristics	The subject device and the predicate device are both sterile, powder-free nitrile exam gloves tested for resistance to permeation by chemotherapy drugs.
--	--

Technological Characteristics Comparison Table			
	Subject Device	Predicate Device K183132	Comparison
FDA Product Code	LZA, LZC, QDO	LZA, LZC	Same
FDA Classification	Class I	Class I	Same
Regulation Number	880.6250	880.6250	Same
Common Name	Medical Exam Glove	Medical Exam Glove	Same
Device Trade Name	Halyard Pink Underguard Zero Nitrile Sterile Powder-Free Exam Gloves Tested with Chemotherapy Drugs	Halyard Pink Underguard Nitrile Powder-Free Exam Glove Tested for Use with Chemotherapy Drugs	Similar
Intended Use	Halyard Pink Underguard Nitrile Sterile Powder-Free Exam Gloves Tested with Chemotherapy Drugs are disposable device intended for medical purposes that is worn on the examiner's hand to prevent contamination between patient and examiner. These gloves were tested for use with chemotherapy drugs listed on the label.	The Halyard Pink Underguard Nitrile Powder-Free Exam Glove Tested for Use with Chemotherapy Drugs is a disposable device intended for medical purposes that is worn on the examiner's hand to prevent contamination between patient and examiner. These gloves were tested for use with chemotherapy drugs listed on the label.	Same
Technological Characteristics	The glove is a colored, nitrile, powder-free, textured fingertip, ambidextrous, patient examination glove.	The glove is a colored, nitrile, powder-free, textured fingertip, ambidextrous, patient examination glove.	Same
Sizes of gloves	XS, S, M, L, XL (Sterile)	XS, S, M, L, XL	Different
Texture	Textured fingertips (Sterile)	Textured fingertips	Different

Sterility	Sterile.	Non Sterile	Different
Biocompatibility	Based ISO 10993 Biological evaluation of Medical devices – Test for Systemic Injection, the test article was considered non- toxic. Meets the acceptance criteria.	Based ISO 10993 Biological evaluation of Medical devices – Test for Systemic Injection, the test article was considered non-toxic. Meets the acceptance criteria.	Similar
	Based on ISO 10993- Biological evaluation of Medical Devices – Test for Skin Irritation, the device extracts were not found to cause a systemic response in the animal model. Meets the acceptance criteria.	Based on ISO 10993- Biological evaluation of Medical Devices – Test for Skin Irritation, the device extracts were not found to cause a systemic response in the animal model. Meets the acceptance criteria.	
	Based on ISO 10993- Biological evaluation of Medical Device Dermal Sensitization- ISO Kligman Maximization Test - NaCl and CSO extracts. The test article were classified as a non- sensitizer. Based on the criteria of the protocol, the test article meets the requirements of the ISO 10993-10 guidelines.	Based on ISO 10993- Biological evaluation of Medical Device Dermal Sensitization- ISO Kligman Maximization Test - NaCl and CSO extracts. The test article were classified as a non- sensitizer. Based on the criteria of the protocol, the test article meets the requirements of the ISO 10993- 10 guidelines.	

Performance Data for Chemotherapy Drugs				
Standard	Results Subject Device (sterile)	Results Predicate Device K183132	Remarks	
ASTM D6978-05 Standard Practice for Assessment of Resistance of Medical Gloves to Permeation by Chemotherapy Drugs	Azacitidine (Vidaza) (25 mg/ml) No breakthrough up to 240 minutes Bendamustine (5 mg/ml) No breakthrough up to 240 minutes Bleomycin sulfate (15 mg/ml) No breakthrough up to 240 minutes Bortezomib (6 mg/ml) No breakthrough up to 240 minutes Busulfan (6 mg/ml) No breakthrough up to 240 minutes Capecitabine (26 mg/ml) No breakthrough up to 240 minutes Carboplatin (10 mg/ml) No breakthrough up to 240 minutes Carfilzomib (2 mg/ml) No breakthrough up to 240 minutes	Arsenic Trioxide (1 mg/ml) No breakthrough up to 240 minutes Azacitidine (Vidaza) (25 mg/ml) No breakthrough up to 240 minutes Bendamustine (5 mg/ml) No breakthrough up to 240 minutes Bortezomib (Velcade) (1 mg/ml) No breakthrough up to 240 minutes Bleomycin sulfate (15 mg/ml) No breakthrough up to 240 minutes Busulfan (6 mg/ml) No breakthrough up to 240 minutes Carboplatin (10 mg/ml) No breakthrough up to 240 minutes Carfilzomib (2 mg/ml) No breakthrough up to 240 minutes Carmustine (3.3 mg/ml) permeation occurred at 54.7 minutes	Similar	

Cetusimab (Erbitus) (2 mg/ml) No breakthrough up to 240 minutesCetusimab (Erbitus) (2 mg/ml) No breakthrough up to 240 minutesCipplain (1 mg/ml) No breakthrough up to 240 minutesCisplain (1 mg/ml) No breakthrough up to 240 minutesCipplain (1 mg/ml) No breakthrough up to 240 minutesCisplain (1 mg/ml) No breakthrough up to 240 minutesCipplain (1 mg/ml) No breakthrough up to 240 minutesCyclophosphamide (20 mg/ml) No breakthrough up to 240 minutesCyclophosphamide (20 mg/ml) No breakthrough up to 240 minutesCyclophosphamide (21 mg/ml) No breakthrough up to 240 minutesCyclophosphamide (20 mg/ml) No breakthrough up to 240 minutesCyclophosphamide (21 mg/ml) No breakthrough up to 240 minutesCyclophosphamide (21 (100 mg/ml) No breakthrough up to 240 minutesDecaratione (10 mg/ml) No breakthrough up to 240 minutesDacarbazine (10 mg/ml) No breakthrough up to 240 minutesDecaratione (10 mg/ml) No breakthrough up to 240 minutesDacarbazine (10 mg/ml) No breakthrough up to 240 minutesDecatatione (10 mg/ml) No breakthrough up to 240 minutesDacarbazine (10 mg/ml) No breakthrough up to 240 minutesDecatatione (10 mg/ml) No breakthrough up to 240 minutesDacarbazine (10 mg/ml) No breakthrough up to 240 minutesDecatatione (10 mg/ml) No breakthrough up to 240 minutesDacarbazine (10 mg/ml) No breakthrough up to 240 minutesDecatatione (21 mg/ml) No breakthrough up to 240 minutesDacarbazine (10 mg/ml) No breakthrough up to 240 minutesDecatatione (21 mg/ml) No breakthrough up to 240 minutesDacarbazine (10 mg/ml) No breakthrough up to 240 minutesEpicopoine (21 mg/ml)			
breakthrough up to 240 minutes 240 minutes Cisplain (1 mg/m) No breakthrough up to 240 minutes Cladribine (1.0 mg/m) No breakthrough up to 240 minutes Cladribine (1.0 mg/m) No breakthrough up to 240 minutes Cyclophosphamide (20 mg/m) No breakthrough up to 240 minutes Cyclophosphamide (20 mg/m) No breakthrough up to 240 minutes Cyclophosphamide (20 mg/m) No breakthrough up to 240 minutes Cyclophosphamide (20 mg/m) No breakthrough up to 240 minutes Cyclophosphamide (20 mg/m) No breakthrough up to 240 minutes Cytarabine HCL (100 mg/m) No breakthrough up to 240 minutes Dacarbazine (10 mg/m) No breakthrough up to 240 minutes Dacarbazine (10 mg/m) No breakthrough up to 240 minutes Dacarbazine (10 mg/m) No breakthrough up to 240 minutes Dacarbazine (10 mg/m) No breakthrough up to 240 minutes Dootsate (10 mg/m) No breakthrough up to 240 minutes Dacinomycin (0.5 mg/m) No breakthrough up to 240 minutes Dootsate (10 mg/m) No breakthrough up to 240 minutes Dacitabine (5 mg/m) No breakthrough up to 240 minutes Dootsate (10 mg/m) No breakthrough up to 240 minutes Davorubicin HCL (2 mg/m) No breakthrough up to 240 minutes Epirubicin (Ellence) (2 mg/m) No breakthrough up to 240 minutes Doxorubicin HCL (2 mg/m) No breakthrough up to 240 minutes Epirubicin (Ellence) (2 mg/m) No breakthrough up to 240 minutes Divis 240 minutes Epirubicin (Ellence) (2 mg/m) No breakthrough up to 240 minutes Euv			
up to 240 minutes up to 240 minutes Claditione (1.0 mg/ml) No Exclophosphamide (20 mg/ml) No Detectiving up to 240 minutes Cyclophosphamide (20 mg/ml) No Dytestitrough up to 240 minutes Cyclophosphamide (20 mg/ml) No Dytestitrough up to 240 minutes Cyclophosphamide (20 mg/ml) No Dytestitrough up to 240 minutes Cytorene (10 mg/ml) No breakthrough up to 240 minutes Cytorene (10 mg/ml) No breakthrough up to 240 minutes Dacarbazine (10 mg/ml) No Up to 240 minutes Dacarbazine (10 mg/ml) No Dacarbazine (10 mg/ml) No breakthrough up to 240 minutes Dacarbazine (10 mg/ml) No Dacarbazine (10 mg/ml) No breakthrough up to 240 minutes Dacarbazine (10 mg/ml) No Dacarbazine (10 mg/ml) No breakthrough up to 240 minutes Dacarbazine (10 mg/ml) No Dacarbazine (10 mg/ml) No breakthrough up to 240 minutes Dacarbazine (10 mg/ml) No Dacarbazine (10 mg/ml) No breakthrough up to 240 minutes Dacarbazine (10 mg/ml) No Dacarbazine (10 mg/ml) No breakthrough up to 240 minutes Dacarbazine (10 mg/ml) No Dacarbazine (10 mg/ml) No breakthrough Etoposide (20 mg/ml) No Dacarbazine (25 mg/ml) No breakthrough up to 240 minutes Etoposide (20 mg/ml) No Dacarbazine (25 mg/ml) No Fludarabine (25 mg/ml) No breakthrough up to 240 minutes </td <td></td> <td></td> <td></td>			
breakthrough up to 240 minutesbreakthrough up to 240 minutesCyclophosphamide (20 ng/ml) No breakthrough up to 240 minutesCytarabine HCL (100 mg/ml) No breakthrough up to 240 minutesCyclosporine A (100 ng/ml) No breakthrough up to 240 minutesCytarabine HCL (100 mg/ml) No breakthrough up to 240 minutesCytarabine HCL (100 mg/ml) No breakthrough up to 240 minutesDacarbazine (10 mg/ml) No breakthrough up to 240 minutesDactinomycin (0.5 mg/ml) No breakthrough up to 240 minutesDocetaxel (10 mg/ml) No breakthrough up to 240 minutesDactinomycin (0.5 mg/ml) No breakthrough up to 240 minutesDocetaxel (10 mg/ml) No breakthrough up to 240 minutesDactinomycin (0.5 mg/ml) No breakthrough up to 240 minutesDocetaxel (10 mg/ml) No breakthrough up to 240 minutesDactinomycin (0.5 mg/ml) No breakthrough up to 240 minutesEpirubicin (Ellence) (2 mg/ml) No breakthrough up to 240 minutesDocetaxel (10 mg/ml) No breakthrough up to 240 minutesEpirubicin (Ellence) (2 mg/ml) No breakthrough up to 240 minutesDocetaxel (10 mg/ml) No breakthrough up to 240 minutesFludarabine (25 mg/ml) No breakthrough up to 240 minutesDocetaxel (10 mg/ml) No breakthrough up to 240 minutesFludarabine (25 mg/ml) No breakthrough up to 240 minutesEpirubicin (Ellence) (2 mg/ml) No breakthrough up to 240 minutesFludarabine (25 mg/ml) No breakthrough up to 240 minutes <td></td> <td>(3)</td> <td></td>		(3)	
breakthrough up to 240 minutes breakthrough up to 240 minutes Cyclosporine A (100 mg/ml) No breakthrough up to 240 minutes Cytovene (10 mg/ml) No breakthrough up to 240 minutes Cytovene (10 mg/ml) No breakthrough up to 240 minutes Daucorbaine (10 mg/ml) No breakthrough up to 240 minutes Datarbazine (10 mg/ml) No breakthrough up to 240 minutes Daucorbaine (10 mg/ml) No breakthrough up to 240 minutes Dactinomycin (0.5 mg/ml) No breakthrough up to 240 minutes Dacitabazine (10 mg/ml) No breakthrough up to 240 minutes Daurorubicin HCL (5 mg/ml) No breakthrough up to 240 minutes Docetaxel (10 mg/ml) No breakthrough up to 240 minutes Daurorubicin HCL (5 mg/ml) No breakthrough up to 240 minutes Docetaxel (20 mg/ml) No breakthrough up to 240 minutes Docetaxel (10 mg/ml) No breakthrough up to 240 minutes Epirubicin (Ellence) (2 mg/ml) No breakthrough up to 240 minutes Docetaxel (10 mg/ml) No breakthrough up to 240 minutes Epirubicin (Ellence) (2 mg/ml) No breakthrough up to 240 minutes Docetaxel (10 mg/ml) No breakthrough up to 240 minutes Fludarabine (25 mg/ml) No breakthrough up to 240 minutes Etoposide (20 mg/ml) No breakthrough up to 240 minutes Fludarabine (25 mg/ml) No breakthrough up to 240 minutes Fludarabine (25 mg/ml) No breakthrough up to 240 minutes Gencitabine (38 mg/ml) No breakthrough up to 240 minutes Fludarabine (25 mg/ml) No breakthrough up to 240 minutes Idarubicin (1 mg/ml) No br			
breakthrough up to 240 minutes to 240 minutes Cytarabine HCL (100 mg/ml) No breakthrough up to 240 minutes Dacarbazine (10 mg/ml) No breakthrough up to 240 minutes Cytovene (10 mg/ml) No breakthrough up to 240 minutes Daurorubicin HCL (5 mg/ml) No breakthrough up to 240 minutes Dacarbazine (10 mg/ml) No breakthrough up to 240 minutes Decitabine (5 mg/ml) No breakthrough up to 240 minutes Dationomycin (0.5 mg/ml) No breakthrough up to 240 minutes Decitabine (5 mg/ml) No breakthrough up to 240 minutes Daunorubicin HCL (6 mg/ml) No breakthrough up to 240 minutes Doxorubicin HCL (2 mg/ml) No breakthrough up to 240 minutes Decitabine (5 mg/ml) No breakthrough up to 240 minutes Etipublicin (Ellence) (2 mg/ml) No breakthrough up to 240 minutes Doxorubicin HCL (2 mg/ml) No breakthrough up to 240 minutes Etipublicin (Ellence) (2 mg/ml) No breakthrough up to 240 minutes Epirublicin (Ellence) (2 mg/ml) No breakthrough up to 240 minutes Fludarabine (25 mg/ml) No breakthrough up to 240 minutes Fludarabine (25 mg/ml) No breakthrough up to 240 minutes Fludarabine (38 mg/ml) No breakthrough up to 240 minutes Fludarabine (25 mg/ml) No breakthrough up to 240 minutes Gemcitabine (38 mg/ml) No breakthrough up to 240 minutes Fludarabine (25 mg/ml) No breakthrough up to 240 minutes Itosfamide (50 mg/ml) No breakthrough up to 240 minutes Fludarabine (26 mg/ml) No breakthrough up to 240 minutes Itosfamide (50 mg/			
breakthrough up to 240 minutesup to 240 minutesCytovene (10 mg/ml) No breakthrough up to 240 minutesDaunorubicin HCL (5 mg/ml) No breakthrough up to 240 minutesDacarbazine (10 mg/ml) No breakthrough up to 240 minutesDecitabine (5 mg/ml) No breakthrough up to 240 minutesDactinomycin (0.5 mg/ml) No breakthrough up to 240 minutesDecitabine (7 mg/ml) No breakthrough up to 240 minutesDaunorubicin HCL (6 mg/ml) No breakthrough up to 240 minutesDocetaxel (10 mg/ml) No breakthrough up to 240 minutesDecitabine (5 mg/ml) No breakthrough up to 240 minutesDocetaxel (2 mg/ml) No breakthrough up to 240 minutesDocetaxel (10 mg/ml) No breakthrough up to 240 minutesEloposide (20 mg/ml) No breakthrough up to 240 minutesDocetaxel (10 mg/ml) No breakthrough up to 240 minutesEloposide (20 mg/ml) No breakthrough up to 240 minutesDocorubicin HCL (2 mg/ml) No breakthrough up to 240 minutesFludrarabine (25 mg/ml) No breakthrough up to 240 minutesEpirubicin (Ellence) (2 mg/ml) No breakthrough up to 240 minutesFludrarabine (25 mg/ml) No breakthrough up to 240 minutesEtoposide (20 mg/ml) No breakthrough up to 240 minutesFludrarabine (25 mg/ml) No breakthrough up to 240 minutesEtoposide (20 mg/ml) No breakthrough up to 240 minutesFludrarabine (38 mg/ml) No breakthrough up to 240 minutesFludrarabine (25 mg/ml) No breakthrough up to 240 minutesGemcitabine (38 mg/ml) No breakthrough up to 240 minutesFludrarabine (25 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No to 240 minutesFludrarabine (25 mg/ml) No breakthrough up to 240 minutes			
up to 240 minutesbreakthrough up to 240 minutesDacarbazine (10 mg/ml) No breakthrough up to 240 minutesDecitabine (5 mg/ml) No breakthrough up to 240 minutesDactinomycin (0.5 mg/ml) No breakthrough up to 240 minutesDocetazel (10 mg/ml) No breakthrough up to 240 minutesDaunorubicin HCL (5 mg/ml) No breakthrough up to 240 minutesDocetazel (10 mg/ml) No breakthrough up to 240 minutesDecitabine (5 mg/ml) No breakthrough up to 240 minutesDocorubicin HCL (2 mg/ml) No breakthrough up to 240 minutesDocetazel (10 mg/ml) No breakthrough up to 240 minutesEiroboicin (Elence) (2 mg/ml) No breakthrough up to 240 minutesDocorubicin HCL (2 mg/ml) No breakthrough up to 240 minutesEiroboica (20 mg/ml) No breakthrough up to 240 minutesDocorubicin HCL (2 mg/ml) No breakthrough up to 240 minutesFludarabine (25 mg/ml) No breakthrough up to 240 minutesEiroboside (20 mg/ml) No breakthrough up to 240 minutesFludarabine (26 mg/ml) No breakthrough up to 240 minutesFludarabine (25 mg/ml) No breakthrough up to 240 minutesFludarabine (38 mg/ml) No breakthrough up to 240 minutesFludarabine (25 mg/ml) No breakthrough up to 240 minutesGemcitabine (30 mg/ml) No breakthrough up to 240 minutesFludarabine (38 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No breakthrough up to 240 minutesFulvestrant (50 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No breakthrough up to 240 minutesGemcitabine (38 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No breakthrou			
breakthrough up to 240 minutesto 240 minutesDactinomycin (0.5 mg/ml) No breakthrough up to 240 minutesDocetaxel (10 mg/ml) No breakthrough up to 240 minutesDaunorubicin HCL (5 mg/ml) No breakthrough up to 240 minutesDocorubicin HCL (2 mg/ml) No breakthrough up to 240 minutesDecitabine (6 mg/ml) No breakthrough up to 240 minutesEpirubicin (Ellence) (2 mg/ml) No breakthrough up to 240 minutesDocetaxel (10 mg/ml) No breakthrough up to 240 minutesEtoposide (20 mg/ml) No breakthrough up to 240 minutesDocorubicin HCL (2 mg/ml) No breakthrough up to 240 minutesFludarabine (25 mg/ml) No breakthrough up to 240 minutesEpirubicin (Ellence) (2 mg/ml) No breakthrough up to 240 minutesFludarabine (25 mg/ml) No to 240 minutesEtoposide (20 mg/ml) No breakthrough up to 240 minutesFludarabine (25 mg/ml) No to 240 minutesFludarabine (25 mg/ml) No breakthrough up to 240 minutesGemcitabine (38 mg/ml) No breakthrough up to 240 minutesFludarabine (25 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesFulvestrant (50 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesFulvestrant (50 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No <b< td=""><td></td><td></td><td></td></b<>			
breakthrough up to 240 minutesto 240 minutesDaunorubicin HCL (5 mg/ml) No breakthrough up to 240 minutesDoxorubicin HCL (2 mg/ml) No breakthrough up to 240 minutesDecitabine (5 mg/ml) No breakthrough up to 240 minutesDoxorubicin HCL (2 mg/ml) No breakthrough up to 240 minutesDocetaxel (10 mg/ml) No breakthrough up to 240 minutesEiprubicin (Ellence) (2 mg/ml) No breakthrough up to 240 minutesDocorubicin HCL (2 mg/ml) No breakthrough up to 240 minutesFludarabine (25 mg/ml) No breakthrough up to 240 minutesEiprubicin (Ellence) (2 mg/ml) No breakthrough up to 240 minutesFludarabine (25 mg/ml) No breakthrough up to 240 minutesEipoposide (20 mg/ml) No breakthrough up to 240 minutesFludarabine (25 mg/ml) No breakthrough up to 240 minutesFludarabine (25 mg/ml) No breakthrough up to 240 minutesFludarabine (38 mg/ml) No breakthrough up to 240 minutesFludarabine (38 mg/ml) No breakthrough up to 240 minutesGemcitabine (38 mg/ml) No to 240 minutesFulvestrant (50 mg/ml) No breakthrough up to 240 minutesIrinotecan (20 mg/ml) No to 240 minutesFulvestrant (50 mg/ml) No breakthrough up to 240 minutesIrinotecan (20 mg/ml) No to 240 minutesFulvestrant (50 mg/ml) No breakthrough up to 240 minutesIrinotecan (20 mg/ml) No to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesIrinotecan (20 mg/ml) No to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesMechlorethamine HCL (1 mg/ml) No to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesMechlorethamine HCL (1 mg/ml) No to 240 minutes <td></td> <td></td> <td></td>			
breakthrough up to 240 minutesbreakthrough up to 240 minutesDecitabine (5 mg/ml) No breakthrough up to 240 minutesEpirubicin (Ellence) (2 mg/ml) No breakthrough up to 240 minutesDocetaxel (10 mg/ml) Nobreakthrough up to 240 minutesEtoposide (20 mg/ml) No breakthrough up to 240 minutesDocotaxel (10 mg/ml) Nobreakthrough up to 240 minutesEtoposide (20 mg/ml) No breakthrough up to 240 minutesDocotaxel (10 mg/ml) No breakthrough up to 240 minutesFludarabine (25 mg/ml) No breakthrough up to 240 minutesEpirubicin (Ellence) (2 mg/ml) No breakthrough up to 240 minutesFludarabine (25 mg/ml) No breakthrough up to 240 minutesFludarabine (25 mg/ml) No breakthrough up to 240 minutesGerncitabine (38 mg/ml) No breakthrough up to 240 minutesFludarabine (25 mg/ml) No breakthrough up to 240 minutesGerncitabine (38 mg/ml) No breakthrough up to 240 minutesFludarabine (25 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesFludarabine (25 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesFludestrant (50 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesGerncitabine (38 mg/ml) No breakthrough up to 240 minutesIrinotecan (20 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesIrinotecan (20 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesIrinotecan (20 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No breakthrough <td>, , , ,</td> <td></td> <td></td>	, , , ,		
up to 240 minutesbreakthrough up to 240 minutesDocetaxel (10 mg/ml) No breakthrough up to 240 minutesEtoposide (20 mg/ml) No breakthrough up to 240 minutesDoxorubicin HCL (2 mg/ml) No breakthrough up to 240 minutesFludarabine (25 mg/ml) No breakthrough 			
up to 240 minutesto 240 minutesDoxorubicin HCL (2 mg/ml) No breakthrough up to 240 minutesFludarabine (25 mg/ml) Nobreakthrough up to 240 minutesEpirubicin (Ellence) (2 mg/ml) No breakthrough up to 240 minutesFluorouracil (50 mg/ml) Nobreakthrough up to 240 minutesEtoposide (20 mg/ml) No breakthrough up to 240 minutesFluorouracil (50 mg/ml) No breakthrough up to 240 minutesFludarabine (25 mg/ml) No breakthrough up to 240 minutesFulvestrant (50 mg/ml) No breakthrough up to 240 minutesFludarabine (25 mg/ml) No breakthrough up to 240 minutesGemcitabine (38 mg/ml) No breakthrough up to 240 minutes5-Fluorouracil (50 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesFulvestrant (50 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No to 240 minutesGemcitabine (38 mg/ml) No breakthrough up to 240 minutesIrinotecan (20 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesMechlorethamine HCL (1 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No to 240 minutesMelphalan (5 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No breakthrough up to 240 minutesMelphalan (5 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No breakthrough up to 240 minutesMelphalan (5 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No breakthrough up to 240 minutesMelphalan (5 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No breakthrough up to 240 minutesMelphalan (5 mg/ml) No breakt			
breakthrough up to 240 minutesup to 240 minutesEpirubicin (Ellence) (2 mg/ml) No breakthrough up to 240 minutesFluorouracil (50 mg/ml) No breakthrough up to 240 minutesEtoposide (20 mg/ml) No breakthrough up to 240 minutesFulvestrant (50 mg/ml) No breakthrough up to 240 minutesFludarabine (25 mg/ml) No breakthrough up to 240 minutesGemcitabine (38 mg/ml) No breakthrough up to 240 minutesS-Fluorouracil (50 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesFulvestrant (50 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesFulvestrant (50 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No to 240 minutesGemcitabine (38 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesIrinotecan (20 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesMechlorethamine HCL (1 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No breakthrough up to 240 minutesMelphalan (5 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No breakthrough up to 240 minutesMelphalan (5 mg/ml) No breakthrough up to 240 minutes			
breakthrough up to 240 minutesup to 240 minutesEtoposide (20 mg/ml) No breakthrough up to 240 minutesFulvestrant (50 mg/ml) No breakthrough up to 240 minutesFludarabine (25 mg/ml) No breakthrough up to 240 minutesGemcitabine (38 mg/ml) No breakthrough up to 240 minutes5-Fluorouracil (50 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesFulvestrant (50 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No to 240 minutesGemcitabine (38 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No breakthrough up to 240 minutesGemcitabine (38 mg/ml) No breakthrough up to 240 minutesIrinotecan (20 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesMechlorethamine HCL (1 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No breakthrough up to 240 minutesMelphalan (5 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No breakthrough up to 240 minutesMelphalan (5 mg/ml) No breakthrough up to 240 minutes			
up to 240 minutesup to 240 minutesup to 240 minutesFludarabine (25 mg/ml) No breakthrough up to 240 minutesGemcitabine (38 mg/ml) No breakthrough up to 240 minutes5-Fluorouracil (50 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesFulvestrant (50 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No to 240 minutesGemcitabine (38 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No breakthrough up to 240 minutesGemcitabine (38 mg/ml) No breakthrough up to 240 minutesIrinotecan (20 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesMechlorethamine HCL (1 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No breakthrough up to 240 minutesMelphalan (5 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No breakthrough up to 240 minutesMelphalan (5 mg/ml) No breakthrough up to 240 minutes			
breakthrough up to 240 minutesup to 240 minutes5-Fluorouracil (50 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesFulvestrant (50 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No breakthrough up to 240 minutesGemcitabine (38 mg/ml) No breakthrough up to 240 minutesIrinotecan (20 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesIrinotecan (20 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesMechlorethamine HCL (1 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No breakthrough up to 240 minutesMelphalan (5 mg/ml) No breakthrough up to 240 minutesIrinotecan (20 mg/ml) No breakthrough breakthrough up to 240 minutesMelphalan (5 mg/ml) No breakthrough up to 240 minutes			
breakthrough up to 240 minutesto 240 minutesFulvestrant (50 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No breakthrough up to 240 minutesGemcitabine (38 mg/ml) No breakthrough up to 240 minutesIrinotecan (20 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesMechlorethamine HCL (1 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No breakthrough up to 240 minutesMechlorethamine HCL (1 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No breakthrough up to 240 minutesMelphalan (5 mg/ml) No breakthrough up to 240 minutesIrinotecan (20 mg/ml) No breakthrough breakthrough up to 240 minutesMelphalan (5 mg/ml) No breakthrough up to 240 minutes			
breakthrough up to 240 minutesto 240 minutesGemcitabine (38 mg/ml) No breakthrough up to 240 minutesIrinotecan (20 mg/ml) No breakthrough up to 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesMechlorethamine HCL (1 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No breakthrough up to 240 minutesMelphalan (5 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No breakthrough up to 240 minutesMelphalan (5 mg/ml) No breakthrough up to 240 minutesIrinotecan (20 mg/ml) No breakthroughMethotrexate (25 mg/ml) No breakthrough			
breakthrough up to 240 minutesto 240 minutesIdarubicin (1 mg/ml) No breakthrough up to 240 minutesMechlorethamine HCL (1 mg/ml) No breakthrough up to 240 minutesIfosfamide (50 mg/ml) No breakthrough up to 240 minutesMelphalan (5 mg/ml) No breakthrough up to 240 minutesIrinotecan (20 mg/ml) No breakthroughMethotrexate (25 mg/ml) No breakthrough			
up to 240 minutesbreakthrough up to 240 minutesIfosfamide (50 mg/ml) No breakthrough up to 240 minutesMelphalan (5 mg/ml) No breakthrough up to 240 minutesIrinotecan (20 mg/ml) No breakthroughMethotrexate (25 mg/ml) No breakthrough			
breakthrough up to 240 minutes to 240 minutes Irinotecan (20 mg/ml) No breakthrough Methotrexate (25 mg/ml) No breakthrough		(3)	

	[[
Leuprolide acetate salt (5mg/ml) No breakthrough up to 240 minutes	Mitomycin-C (0.5 mg/ml) No breakthrough up to 240 minutes
Mechlorethamine HCL (1 mg/ml) No breakthrough up to 240 minutes	Mitoxantrone (2 mg/ml) Nobreakthrough up to 240 minutes
Melphalan (5 mg/ml) No breakthrough up to 240 minutes	Oxaliplatin (2 mg/ml) No breakthrough up to 240 minutes
Methotrexate (25 mg/ml) No breakthrough up to 240 minutes	Paclitaxel (6 mg/ml) No breakthrough up to 240 minutes
Mitomycin-C (0.5 mg/ml) No breakthrough up to 240 minutes	Paraplatin (10 mg/ml) No breakthrough up to 240 minutes
Mitoxantrone (2 mg/ml) No breakthrough up to 240 minutes	Pemetrexed (25 mg/ml) Nobreakthrough up to 240 minutes
Oxaliplatin (2 mg/ml) Nobreakthrough up to 240 minutes	Pertuzumab (30 mg/ml) Nobreakthrough up to 240 minutes
Paclitaxel (6 mg/ml) Nobreakthrough up to 240 minutes	Raltitrexed (0.5 mg/ml) Nobreakthrough up to 240 minutes
Pemetrexed (25 mg/ml) No breakthrough up to 240 minutes	Retrovir (10 mg/ml) No breakthrough up to 240 minutes
Raltitrexed (0.5 mg/ml) No breakthrough up to 240 minutes	Rituximab (10 mg/ml) No breakthrough up to 240 minutes
Retrovir (10 mg/ml) No breakthrough up to 240 minutes	Temsirolimus (25 mg/ml) No breakthrough up to 240 minutes
Rituximab (10 mg/ml) Nobreakthrough up to 240 minutes	Trastuzumab (21 mg/ml) No breakthrough up to 240 minutes
Temsirolimus (25 mg/ml) No breakthrough up to 240 minutes	ThioTEPA (10 mg/ml) No breakthrough up to 134.7 minutes
ThioTEPA (10 mg/ml) No breakthrough up to 240 minutes	Topotecan HCL (1 mg/ml) No breakthrough up to 240 minutes
Topotecan HCL (1 mg/ml) No breakthrough up to 240 minutes	Triclosan (1 mg/ml) No breakthrough up to 240 minutes
Triclosan (1 mg/ml) No breakthrough up to 240 minutes	Trisenox (0.1 mg/ml) No breakthrough up to 240 minutes
Trisenox (0.1 mg/ml) Nobreakthrough up to 240 minutes	Vincrinstine Sulfate (1 mg/ml) No breakthrough up to 240 minutes
Vinblastine (1 mg/ml) Nobreakthrough up to 240 minutes	Vinblastine (1 mg/ml) No breakthrough up to 240 minutes
Vincrinstine Sulfate (1 mg/ml) No breakthrough up to 240 minutes	Vinorelbine (10 mg/ml) No breakthrough up to 240 minutes
Vinorelbine (10 mg/ml) No breakthrough up to 240 minutes	Zoledronic Acid (0.8 mg/ml) No breakthrough up to 240 minutes
Zoledronic Acid (0.8 mg/ml) No breakthrough up to 240 minutes	

Performance Data for Chemotherapy Drugs			
Standard	Results Subject Device (sterile)	Results Predicate Device K183132	Remarks
ASTM D 6978	Fentanyl Citrate Injection, (100mcg /2mL). No breakthrough up to 240 minutes	No tested	Different

ASTM D5151-06 Standard Test Method for Detection of Holes in Medical Gloves	Testing of the subject device shows it meets the 2.5% AQL requirement in the standards for leakage. The device meets the acceptance criteria of the standard.	Testing of the subject device shows it meets the 2.5% AQL requirement in the standards for leakage. The device meets the acceptance criteria of the standard.	Same
ASTM D6124-06 Standard Test Method for Residual Powder on Medical Gloves	Residual powder on the subject device is an average of 0.4 mg/glove within the powder-free limit of < 2 mg maximum powder per glove and meets the acceptance criteria for powder- free.	Residual powder on the subject device is an average of 0.4 mg/glove within the powder-free limit of < 2 mg maximum powder per glove and meets the acceptance criteria for powder- free.	Same
ASTM D6319-10 Standard Specification for Nitrile Examination Gloves for Medical Applications	The physical dimensions of the subject device are within the limits of the standard and the physical properties of the subject device met the requirements for tensile strength before and after aging. The subject device also met the requirement for elongation before and after aging.	The physical dimensions of the subject device are within the limits of the standard and the physical properties of the subject device met the requirements for tensile strength before and after aging. The subject device also met the requirement for elongation before and after aging.	Same
ISO 10993 Biological evaluation of medical devices	Meets acceptance criteria	Meets acceptance criteria	Same
Conclusion:	the Halyard Pink Underguard Zero N	nclinical tests demonstrate that the subject Nitrile Sterile Powder-Free Exam Gloves s effective, and performs as well as or be e.	Tested with