



Delays in Chemotherapy in the Asian Pacific Islander Population: A NCDB Review



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BACKGROUND

- Delays in adjuvant chemotherapy of greater than 120 days has been shown to lead to worse overall survival
- Very little is known about the reasons for delays in the Asian and Pacific Islander (API) population, which comprises one of the fastest growing ethnicity groups in the United States
- We used the National Cancer Database (NCDB) to review the associated factors leading to delays in chemotherapy within the API population

METHODS

- Using the NCDB, we analyzed time from diagnosis to initiation of adjuvant chemotherapy in non-neoadjuvant women with stage I-III breast cancer diagnosed between 2010 and 2015, and in whom ethnicity was classified under the Asian or Pacific Islander subgroups
- Treatment delay was defined as greater than 120-days from diagnosis to adjuvant chemotherapy
- Chi-square and adjusted multivariate logistic regression analyses were used to examine factors associated with delays in initiation of adjuvant chemotherapy

	Chemotherapy, No. (%)		Total	p-Value
	≤ 120 days	> 120 days		
Geographic Region				
Northeast	1633 (87.1)	242 (12.9)	1875	<0.0001
Midwest	1027 (93.2)	75 (6.8)	1102	
South	1425 (89.6)	165 (10.4)	1590	
West	3029 (85.1)	532 (14.9)	3561	
Income				
High SES	4189 (88.5)	542 (11.5)	4731	0.001
Low SES	2925 (86.1)	472 (13.9)	3397	
Insurance				
Uninsured	224 (88.9)	53 (19.1)	277	0.0006
Insured	6890 (87.8)	961 (12.2)	7851	
Disease Stage				
Stage 1	2444 (87.1)	361 (12.9)	2805	0.1129
Stage 2	3475 (87.2)	509(12.8)	3984	
Stage 3	1195 (89.3)	144 (10.8)	1339	
Days from Diagnosis to Surgery				
1-30 days	3517 (96.1)	144 (3.9)	3661	<0.0001
31-60 days	2482 (88.3)	328 (11.7)	2810	
61-90 days	346 (52.2)	317 (47.8)	663	
91-120 days	8 (5.1)	150 (94.9)	158	
Unknown	712 (85.2)	124 (14.8)	836	
Age				
18-44	1100 (87.4)	158 (12.56)	1258	0.719
45-69	5468 (87.6)	771 (12.4)	6239	
>70	546 (86.5)	85 (13.5)	631	

RESULTS

- Of the 9,247 patients that met inclusion criteria, 1,110 (12%) of patients had ≥120-days from diagnosis to adjuvant chemotherapy
- Factors related to delays were patients living on the West coast compared to the Midwest, having lower socioeconomic status (SES), being uninsured, having stage 1 cancers, and being treated in an academic center
- Increased time from diagnosis to surgery directly correlated with increased incidence of delays to chemotherapy

CONCLUSIONS

- APIs comprise one of the fastest growing populations in the United States
- Having lower SES, stage 1 cancer, and treatment in an academic facility, as well as being uninsured or treated on the West coast of the United States are related with delayed treatment
- Further knowledge of factors related to delays in care provide opportunities for continued improvement in breast cancer management

